STOCKPILE LEGISLATION

HEARINGS

BEFORE THE

SUBCOMMITTEE ON PREPAREDNESS

OF THE

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

FIRST SESSION

ON

S. 906

TO AUTHORIZE CERTAIN TRANSACTIONS INVOLVING THE ACQUISITION AND DISPOSAL OF STRATEGIC AND CRITICAL MATERIALS FOR THE NATIONAL DEFENSE STOCKPILE

S. 1338

TO AMEND THE STRATEGIC AND CRITICAL MATERIALS STOCK PILING REVISION ACT OF 1979 IN ORDER TO PRESCRIBE THE METHOD FOR DETERMINING THE QUANTITY OF ANY MATERIAL TO BE STOCKPILED UNDER SUCH ACT, AND FOR OTHER PURPOSES

S. 1823

TO AMEND THE OMNIBUS BUDGET RECONCILIATION ACT OF 1981 AND STRATEGIC AND CRITICAL MATERIALS STOCK PILING ACT, TO ASSURE AN ADEQUATE SUPPLY OF SILVER TO THE UNITED STATES IN TIMES OF NATIONAL EMERGENCY AND THAT EXCESS SUPPLIES ARE DISPOSED OF IN A MANNER THAT MINIMIZES THE POTENTIAL FOR MARKET DISRUPTIONS WHILE PROVIDING MAXIMUM REVENUES TO ACQUIRE OTHER STOCKPILE MATERIALS THAT ARE IN SHORT SUPPLY

JUNE 17, 19, DECEMBER 14, 1981

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STOCKPILE LEGISLATION

WEDNESDAY, JUNE 17, 1981

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

The subcommittee met, in open session at 9:05 a.m., pursuant to notice, in room 212, Russell Senate Office Building, Senator Gordon J. Humphrey, chairman, presiding.

Present: Senator Humphrey.

Staff present: James F. McGovern, general counsel; Paul C. Besozzi, minority counsel; Michael B. Donley, James C. Smith, George F. Travers, professional staff members; and Karen A. Love, staff assistant.

Also present: George Kohl, assistant to Senator Humphrey; Jon Etherton, assistant to Senator Jepsen; Robert Nichols, assistant to Senator Jackson; Frank, Krebs, assistant to Senator Cannon; and Peter Lennon, assistant to Senator Levin.

[The bills S. 906 and S. 1338 follow:]

[S. 906, 97th Cong., 1st sess.]

A BILL To authorize certain transactions involving the acquisition and disposal of strategic and critical materials for the National Defense Stockpile

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Strategic and Critical Materials Transaction Authorization Act of 1981".

SEC. 2. There is hereby authorized to be appropriated the sum of $2,140,000,000 for the acquisition of strategic and critical materials under section 6(a) of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98e(a)).

SEC. 3. The President is hereby authorized to dispose of materials now held in the National Defense Stockpile established by section 3 of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98b) which have been determined to be excess to the current requirements of the stockpile in the following quantities:

(1) One million pounds of iodine.

(2) One million five hundred thousand karats of industrial diamonds crushing bort.

(3) Seven hundred and ten thousand two hundred and fifty-three pounds of mercuric oxide.

(4) Fifty thousand flasks of mercury.

(5) Six million pounds of mica, muscovite splittings.

(6) Twenty-five thousand pounds of mica, pholgopite splittings.

(7) One hundred and thirty-nine million five hundred thousand troy ounces of silver.

SEC. 4. Any acquisition using funds appropriated under the authorization of section 2, and any disposal under the authority of section 3, shall be carried out in accordance with the provisions of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98 et seq.).

[S. 1338, 97th Cong., 1st sess.]

A BILL To amend the Strategic and Critical Materials Stock Piling Revision Act of 1979 in order to prescribe the method for determining the quantity of any material to be stockpiled under such Act, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Strategic and Critical Materials Stock Piling Revision Act of 1981".

SEC. 2. (a) Section 2(a) of the Strategic and Critical Materials Stock Piling Revision Act of 1979 (50 U.S.C. 98a(a)) is amended by adding at the end thereof the following: "To effectuate this policy determinations shall be made from time to time, as provided in this section, regarding which materials are strategic and critical to the United States and the quantities of such materials that should be stockpiled under this Act."

(b) Section 2 of such Act is further amended by redesignating subsection (b) as subsection (c) and adding after subsection (a), as amended by subsection (a) of this section, a new subsection (b) to read as follows:

"(b)(1) The President shall appoint an interagency advisory committee composed of representatives from appropriate departments and agencies of the Government to determine which materials are to be acquired under this Act and what classification such materials shall be assigned under paragraph (2).

"(2) Materials selected to be stockpiled under this Act shall be classified by the interagency advisory committee provided for in paragraph (1) as being one of the three classes prescribed below, as appropriate:

"(A) Class A materials are those materials not produced in the United States or produced in the United States in limited quantities, that are necessary for the security of the United States, are essential to the economy of the United States, and are primarily obtained from foreign sources.

"(B) Class B materials are those materials produced in the United States but are not available in sufficient quantities in the United States to offer the potential for meeting total domestic needs, are necessary to the security of the United States, are essential to the economy of the United States, and are obtained to a substantial extent from foreign sources.

"(C) Class C materials are those materials produced in substantial quantities in the United States, are available in sufficient quantities to meet total domestic requirements, are necessary to the security of the United States, are essential to the economy of the United States, and are obtained to a lesser extent from foreign sources.

"(3) The quantity of any material to be acquired under this Act (stockpile goal) shall be determined as follows:

"(A) the stockpile goal for any material designated as a class A material shall be a quantity equal to three years' domestic net imports of such material.

"(B) the stockpile goal for any material designated as a class B material shall be a quantity equal to two years' domestic net imports of such material.

"(C) the stockpile goal for any material designated as a class C material shall be a quantity equal to one year's net imports of such material.

"(4) Subject to appropriate adjustments under paragraph (5), a year's domestic net imports of any material for purposes of clause (A), or (C) of paragraph (3) shall be a quantity of the material equal to the average annual imports of such material during the five calendar years immediately preceding the calendar year in which the determination for the stockpile goal is being made (base period), plus the average annual sales or minus the average annual purchases of such material made from the stockpile during such five-year base period, reduced by the average annual exports of such material during such five-year base period.

"(5) In determining the quantity under paragraph (4) of any material to be acquired for the stockpile appropriate adjustment shall be made in the computations made under such paragraph in the case of any material which is acquired in both its crude form and in its refined or processed form so as to avoid duplicate calculations with respect to the same material.

"(6) The stockpile goal for any material acquired for the stockpile under this Act shall be reviewed once every four years by the interagency advisory committee referred to in paragraph (1). A revised objective for such material shall be established only if the average annual quantity of imports of such material during the five calendar years immediately preceding the current calendar year increased or decreased by more than 10 per centum of the average annual quantity of such material at the time of the preceding mandatory review under this paragraph.

"(7) Nothing in paragraph (6) shall be construed to prohibit the head of the agency and the interagency advisory committee referred to in paragraph (2) from conducting a review of the stockpile goal for any material at any time other than that prescribed by paragraph (6); but in any case in which such committee determines that the stockpile goal for any material should be computed in a manner other than that prescribed in paragraph (3), the head of the agency shall notify the Congress in writing of that determination and set forth the proposed new formula for computing the stockpile goal for such material. The new formula shall become effective with respect to such material unless within a period of ninety days after the day on which the Congress was notified by the head of the agency, either House of the Congress agrees to a resolution disapproving such formula.".

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. The hearing will come to order.

This morning we are beginning a set of hearings concerning issues surrounding the national defense stockpile and in particular those legislative initiatives concerning the stockpile that have been referred to the Armed Services Committee.

There are two stockpile bills, S. 906, the Administration request which involves the authorization to procure over $2 billion in needed stockpile materials and the authorization to sell over $2 billion worth of excess stockpile materials including a large amount of silver, which sale is somewhat controversial, and S. 1338, Senator McClure's bill which would amend the Strategic and Critical Materials Stock Piling Act to provide for a specific method by which stockpile goals would be calculated.

Today we will hear from Administration witnesses and I intend to follow this agenda. First we will hear from Mr. Gerald Carmen, Administrator of the General Services Administration; second from the Federal Emergency Management Agency, which is responsible for overall stockpile policy issues and planning; third from the Department of Defense. The Department of Defense is the stockpile customer and would be seriously dependent on the stockpile if a national emergency were to occur. Finally we will empanel all three agencies to engage in a question-and-answer exercise to complete the record.

On Friday we have scheduled several witnesses to get other views of the stockpile issue.

I feel that a comment is in order on the question of stockpile legislation as it affects the reconciliation bill now being assembled by the Budget committees. To meet the requirements of the First Concurrent Budget Resolution, Chairman Tower has advised the Budget Committee by letter of the Administration's proposal to sell silver. By the same letter Chairman Tower also advised the Budget Committee that the Armed Services Committee has not considered any stockpile legislation and the Administration's silver sale was forwarded to the Budget Committee without recommendation.

It is this hearing process and subsequent markups that will lead to an Armed Services Committee position on proposed stockpile legislation. The committee will not hesitate at some future date, if the facts appear to warrant, to recommend changes to whatever stockpile legislation may be agreed to in the reconciliation bill.

We will begin in open session, and I expect we can conduct most of this hearing in open session. We may, however, at some point get into classified matters and I am going to rely on the staff and on the witnesses themselves to alert me if we should go into closed session.

Our first witness will be Mr. Gerald Carmen. Do you have a statement?

Mr. CARMEN. Yes.

Good morning, Mr. Chairman.

STATEMENT OF GERALD P. CARMEN, ADMINISTRATOR, GENERAL SERVICES ADMINISTRATION

Mr. CARMEN. Mr. Chairman and members of the subcommittee, I am Gerald Carmen, Administrator of General Services. This is my first opportunity to appear before a congressional subcommittee since my confirmation. I am pleased that this appearance is before my own Senator and good friend and that it is on behalf of an Administration program that is important to our national defense.

The Administration strongly supports enactment of S. 906. This legislation authorizes the disposal of seven commodities including iodine, mica, mercury, and silver which are excess to the national defense stockpile needs. Proceeds from projected sales of these commodities have been estimated at approximately $2.1 billion. Funds generated by the sales will be deposited into the National Defense Stockpile Transaction Fund as required under section 9 of the Strategic and Critical Materials Stock Piling Act and, if appropriated, will be used to acquire strategic and critical materials for which there is a deficit. The disposals provided for in S. 906 are essential in order to generate funds for future acquisitions. Without this legislation, we may not have adequate funds to purchase the budgeted acquisitions for fiscal year 1982.

On March 13, 1981, President Reagan directed the first significant acquisition program for stockpile purposes in 20 years. This program is an essential first step in the overall effort to restructure the stockpile in critical areas of deficiency. We urge your support of this crucial national program and we look forward to working with the Congress on this and other related issues in the months ahead.

At this time I would like to introduce Commissioner Roy Markon who is responsible for the management of the stockpile program within the General Services Administration. Mr. Markon has a more detailed statement which he would like to present to you.

Senator HUMPHREY. Thank you, Mr. Carmen.

Before we turn to Mr. Markon, let me say that as the chairman of the Subcommittee on Preparedness of the Armed Services Committee, I am highly encouraged by the actions of the Administration. I say that to you since you are the highest ranking member of the Administration present today. I hope that the Administration will press this case fully and proceed with the maximum possible speed.

Even to someone who is new to the responsibilities that we are discussing today, as I am and as you are I know, having only been sworn in a few days ago, even to someone who is only beginning to familiarize themselves with the problem, it has to be a very alarming problem indeed and one which has not been effectively dealt with for decades. It is a very dangerous and disturbing situation.

I commend you and the Administration for being the first to grab the bull by the horns, if you will, and I hope that now that you have got the bull by the horns that you will not let go. There have been a lot of efforts in the past which have amounted to naught. So I commend you and the President for your actions in this area.

Mr. CARMEN. Thank you, Mr. Chairman.

Senator HUMPHREY. Mr. Markon, do you have a statement?

Mr. MARKON. Mr. Chairman, I have a statement. For the sake of time I would like with your permission to introduce it for the record and summarize these remarks.

Senator HUMPHREY. So ordered.

[The prepared statement of Roy Markon follows:]

PREPARED STATEMENT BY ROY MARKON, COMMISSIONER, FEDERAL PROPERTY RESOURCES SERVICE, GENERAL SERVICES ADMINISTRATION

Mr Chairman and members of the subcommittee, I am Roy Markon, Commissioner of the Federal Property Resources Service of the General Services Administration (GSA)

In the aftermath of the oil embargo and the political disruptions in some developing countries, the vulnerability of this nation's industrial and defense, capabilities to supply cutoffs in strategic and critical materials has become a matter of broad concern. General Alton D. Slay, the now retired former head in the Air Force Systems Command, expressed these concerns when he testified in November 1980, before the House Armed Services Industrial Preparedness Panel. He said, "It is abundantly clear to me that shortages of critical materials and our dependence on foreign sources for many of them are two of our most critical defense industrial base problems. Without an adequate and dependable resource base, solutions to these problems will be of little help in solving the total industrial base problem."

Congressional concern addressing this issue is evident in the enactment of the Strategic and Critical Materials Stock Piling Act of 1979, Public Law 96–41. This revised policy act provides in Sections 3(b)(1) and 3(b)(2) for a National Defense Stockpile that would meet U.S. strategic and critical materials needs for at least three years in the event of a war or national emergency. A key provision in the 1979 Act is found in Section 9 which established in July 1979, the National Defense Stockpile Transaction Fund. Receipts from authorized sales of excess commodities must be deposited in the fund and with congressional authorization and appropriation, such monies may be used to acquire those strategic and critical materials for the stockpile which are below the approved goals. With this mechanism, Congress has provided the means of restructuring the stockpile to meet approved needs with funds that are generated by the program itself.

As the government's stockpile manager, conducting both its commodity brokerage and warehousing functions, I urge your approval of S. 906, which would continue the National Defense Stockpile restructuring efforts that are needed to meet future defense and industrial preparedness needs.

S. 906, if enacted, would permit the disposal of specified quantities of seven items that are excess to stockpile program needs. After reviewing stockpile goals closely with Department of Defense, GSA and other concerned agencies, the Federal Emergency Management Agency (FEMA) has determined that these items are no longer essential for industrial readiness purposes. These commodities are:

Commodities	Estimated prices	Quantity	Value in millions
Diamonds industrial, crushing (carat)	$2.79	1,500,000	$4.2
Iodine (pounds)	5.31	1,000,000	5.3
Mercuric Oxide (pounds)	7.00	710,253	5.0
Mercury (flasks)	410.00	50,000	20.5
Mica, musc. split. (pounds)	2.00	6,000,000	12.0
Mica, phlog. split. (pounds)	2.00	25,000	.1
Silver (troy ounces)	15.00	139,500,000	2,092.5
Total			2,139.6

At this point, I must stress that the above prices are based on published information, surveys and transaction results, but are subject to change due to domestic and international market conditions.

With stockpile program total goals calling for nearly $20.4 billion worth of materials, present goal (inventory) deficits stand at an estimated $12.9 billion. The excesses we valued at $4.9 billion. Nearly $4.5 billion of the $4.9 billion represents the values of the excess tin, tungsten and silver. Of the total excesses that could be sold to generate funds for acquisitions, silver represents more than one third of the total value. We have an active sales program for tin and tungsten. As you can see by the estimates of receipts to be derived from the excess commodities that are the subject of S. 906, authority for the sale of excess silver is most essential.

Pursuant to Sections 6(a) and 6(b)(1) and 6(b)(2) of Public Law 96–41, sales of these items would be carried out so as to ensure no undue market disruption, and provide a fair return to the U.S. Government. In some instances, the authorized disposal may take several years due to market conditions at the time of authorization and sale. A good example of the length of time required to execute sales is the current sales of tin, which have lagged far behind projections because of the soft market for tin. We need this authority to be able to sell these commodities as market conditions permit.

Funds derived from such sales, if authorized and appropriated, would be used to acquire needed priority materials announced by the Administration on March 13 of this year. These are:

Agricultural—Based Chemical Intermediaries, such as Castor Bean, Oil and Pyrethrum, Aluminum Oxide, Bauxite, Cobalt, Columbium, Cordage Fibers, Fluorspar, Manganese Dioxide, Medicinals (including Opium Salts), Nickel, Platinum Group Metals, Rubber (including Guayule), Tantalum, Titanium (including Rutile), Vanadium.

From the above list, the Administration announced its intention to acquire cobalt as our first purchase for the stockpile restructuring program under the present law.

If the program does not obtain additional disposal authority and specifically the related authorization for appropriations, we will not be able to continue program acquisitions much beyond the end of fiscal year 1982. Public Law 96–175 permitted GSA to sell tin and diamonds and authorized up to $237 million in appropriations. If the 1982 fiscal year request of $120 million is appropriated, then we will only have $17 million remaining for which we might obtain appropriations for acquisitions in fiscal year 1983.

In addition to cobalt, the other items that have been identified as needed for the stockpile may cost more than $8.5 billion to acquire. Actual purchases will be determined by proceeds of sales of excess materials, the level of authorization and appropriations of necessary funds and the market constraints that we may encounter in attempting to buy these strategic and critical materials. We have not yet announced any additional material purchases nor indicated planned acquisitions for fiscal year 1982. We believe that this type of information should be confidential until we are ready to buy, because of the effect of such information on normal markets.

For illustrative purposes only, I have provided the subcommittee a table to indicate how proceeds from the sales of $2.1 billion worth of the excess materials cited in S. 906 could be spent for priority acquisitions. I wish to emphasize that the table is provided as an example of what can be achieved and does not represent our specific acquisition plans.

For example, based on U.S. Bureau of Mines data, we import 93 percent of our cobalt, a commodity which has a stockpile goal of 85.4 million pounds. We could use an estimated $275 million to fulfill 13 percent of the goal in the next several years. The platinum group metals have import dependencies of 87 percent $112 million could be spent to meet 9 percent of the goal for such material and improve our readiness posture.

Again I wish to emphasize that these examples are for discussion purposes only.

Enactment of S. 906 will be the prime source funds for a number of years to help overcome the potential material shortages our defense activities may encounter in a future national emergency. It is essential that the disposal authorization be granted for all the commodities listed in the proposed legislation.

Authorization for the sale of silver is particularly important if we are to meet our program goals.

Although silver, for photography and electronic purposes is essential in war, our emergency secenario indicates available supplies would be adequate for our needs. While silver is important, it is far more important for us to have adequate supplies of cobalt, chromium, manganese or titanium than it is for us to maintain excess stocks of silver in our inventory.

If the disposal of silver is not authorized and the projected revenues are not appropriated, additional ways of funding this essential aspect of our industrial readiness base would be necessary. Without an adequate cash flow from sale of excesses, the National Defense Transaction Fund would be ineffective as the primary means to support program requirements within a reasonable period of time.

Attachments.

Silver Chart

(1) January 31, 1979—March Commodity Exchange (COMEX) silver contracts stood at 27,545 representing 137.725 milllon troy ounces. COMEX warehouse stocks stood at 52.189 million troy ounces. The silver squeeze begins.

(2) February 12, 1979—Chicago Board of Trade (CBOT) raises margin requirement on 5,000 troy ounce silver contracts, the variable limit maintenance being raised to $1,500, up from $800 while other margin requirements were almost doubled.

(3) July 9, 1979—Public Law 96–2: Authorizes GSA to dispose of 978,563 Carson City Silver dollars.

(4) Hearings on S–1397 before the Senate Armed Services Stockpile Subcommittee. S–1397 was to authorize the disposal of materials from the National and Supplemental Stockpiles.

July 25, 1979—Hearings on HR–1325 before the House Armed Services Committee, Subcommittee on Seapower and Strategic and Critical Materials. HR–1325 was introduced into the House on January 25, 1979 to authorize the disposal of 139.5 million troy ounces of silver. Hearings on HR–3385 before the House Armed Services Committee, Subcommittee on Seapower and Strategic and Critical Materials. HR–3385 was introduced into the House on April 2, 1979 to authorize the disposal of 15 million troy ounces of silver.

(5) July 30, 1979—Public Law 96–41: The Strategic and Critical Materials Stockpiling Revision Act of 1979 is signed into law.

(6) October 26, 1979—COMEX raises the margin requirements on 5,000 troy ounce silver contracts from $20,000 to 50,000 per contract.

(7) December 4, 1979—The House tables HR–4665, a proposal to purchase $513 million worth of silver.

(8) December 29, 1979—Public Law 96–175: Strategic and Critical Materials Transaction Authorization Act of 1979 is signed, excluding silver disposal authorization.

(9) February 8, 1980—GSA sells the Carson City Silver dollars.

(10) CBOT votes to establish a 1,000 silver contract pending Commodity Futures Trading Con mission approval.

HANDY AND HARMAN—AVERAGE MONTHLY SILVER PRICES

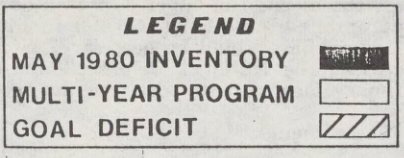
[In dollars per troy ounce]

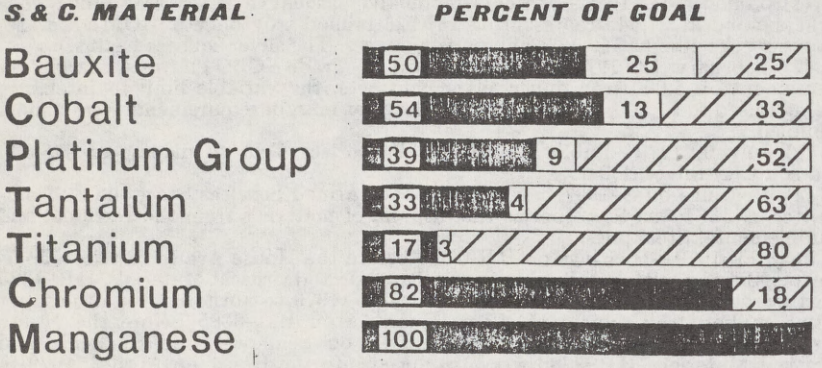
	1979	1980	1981
January	6.2545	38.2563	14.7514
February	7.4172	35.0850	13.0239
March	7.4452	24.1333	12.3382
April	7.4925	14.5000	11.4371
May	8.3735	12.5329	
June	8.5383	15.7476	
July	9.1350	16.0593	
August	9.3339	15.8971	
September	13.9592	20.1438	
October	16.7807	20.1814	
November	16.6026	18.6482	
December	21.7928	16.3933	
Annual average	11.09418	20.63157	

Source: Metals Week.

HYPOTHETICAL STOCKPILE ACQUISITION PROGRAM

(BASED ON H.R. 2912 ESTIMATED RECEIPTS)





NOTE: THIS TABLE IS PROVIDED AS AN EXAMPLE OF WHAT CAN BE ACHIEVED AND DOES NOT REPRESENT SPECIFIC ACQUISITION PLANS OR COMMITMENTS.

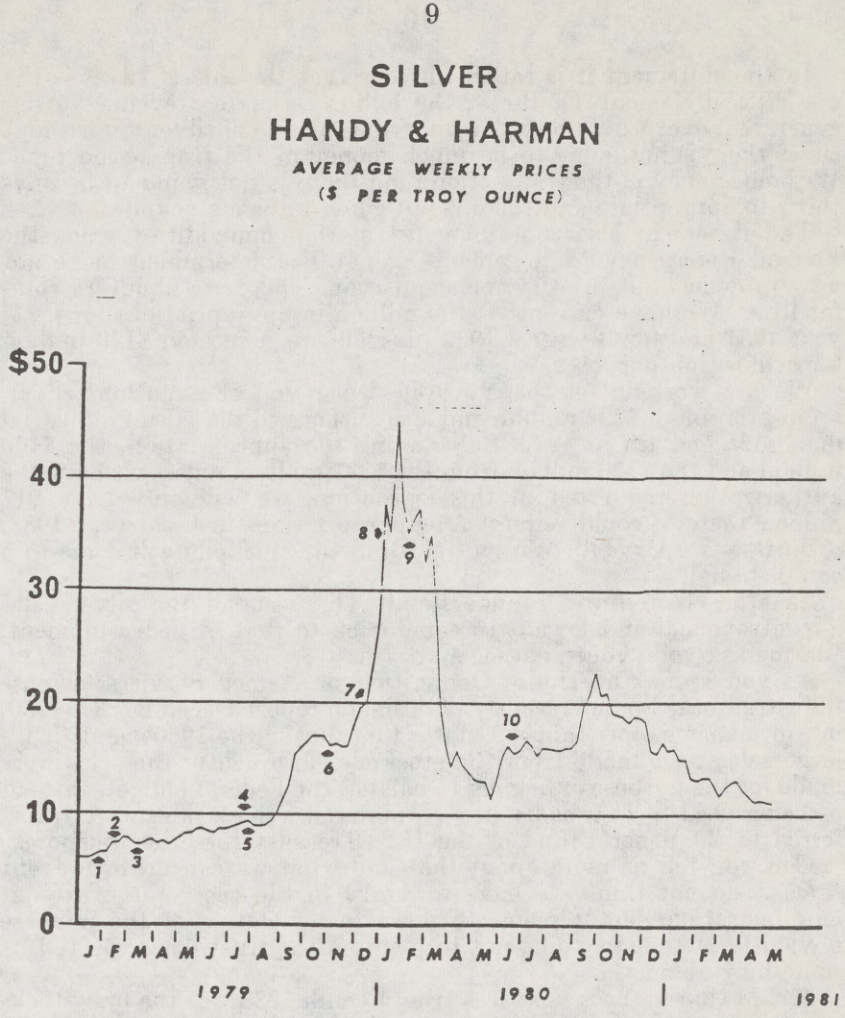
HYPOTHETICAL STOCKPILE ACQUISITION PROGRAM

[Based on H.R. 2912 estimated receipts]

	May 1980 goals	May 1980 inventory	May 1980 goal deficits	Multi-year acquisitions	Remaining deficits	Deficit as percentage of goal
Bauxite (long tons)	29, 25, 0000	14, 642, 025	14, 607, 975	7, 225, 000	7, 382, 975	25
Castor oil (pounds)	22, 000, 000	5, 009, 697	16, 990, 303	3, 000, 000	13, 990, 303	64
Cobalt (pounds)	85, 400, 000	40, 802, 393	44, 597, 607	11, 000, 000	[1] 28, 397, 607	33
Columbium (pounds)	5, 600, 000	2, 928, 424	2, 671, 576	600, 000	2, 071, 576	37
Cordage fibers (pounds)	215, 000, 000	0	215, 000, 000	18, 000, 000	197, 000, 000	92
Fluorspar (short dry tons)	3, 100, 000	1, 307, 721	1, 792, 279	500, 000	1, 292, 279	42
Manganese dioxide (short dry tons)	25, 000	3, 011	21, 989	1, 500	20, 489	82
Nickel (short tons)	200, 000	0	200, 000	40, 000	160, 000	80
Opium salts (ounces)	130, 000	71, 303	58, 697	45, 000	13, 697	11
Platinum group metals (troy ounces)	4, 408, 000	1, 724, 635	2, 683, 365	390, 000	2, 293, 365	52
Pyrethrum (pounds)	500, 000	0	500, 000	75, 000	425, 000	85
Rubber (long tons)	850, 000	119, 208	730, 792	75, 000	655, 792	77
Rutile (short dry tons)	106, 000	39, 186	66, 814	66, 814	0	0
Tantalum (pounds)	8, 400, 000	2, 882, 491	5, 577, 509	300, 000	5, 277, 509	63
Titanium (short tons)	195, 000	32, 331	162, 669	6, 000	156, 669	80
Vanadium (short tons)	7, 700	541	7, 159	3, 000	4, 159	54

[1] Reflects purchase of up to 2,200,000 lbs. of cobalt in fiscal year 1981.

Note: This table is provided as an example of what can be achieved and does not represent specific acquisition plans or commitments.



STATEMENT OF ROY MARKON, COMMISSIONER, FEDERAL PROPERTY RESOURCES SERVICE, GENERAL SERVICES ADMINISTRATION

Mr. MARKON. Simply stated, Mr, Chairman. the country needs a stockpile and the stockpile program needs this legislation.

In my statement, on page 2, I have listed the commodities that that we are asking for authority to sell with some indications of the revenues that can be generated from these sales. Section 9 of the Strategic and Critical Materials Stock Piling Act of 1979 provides that the receipts from the sale of these commodities will go into the transaction fund. It is these funds that will be available for appropriation for the purchase of those commodities for which we have deficits in the stockpile.

In the statement it is rather obvious that the sale of silver is the one critical element. Of the $2.139 billion estimated revenues to be generated, over $2 billion will come from the sale of silver. So without silver there is not going to be much money in the transaction fund. Without money in the transaction fund there is not going to be anything to appropriate and there is not going to be a stockpile.

The statement also contains a list of the commodities which the Federal Emergency Management Agency has determined to be not only in deficit but priority for acquisition. There are about 18 commodities. We have currently $100 million in appropriations for fiscal year 1981 and for the fiscal 1982 program we requested $120 million for acquisition purposes.

We are working on the stockpile legislation that authorized an appropriation of $237 million and also authorized the sale of industrial diamonds and tin in 1979. Subtracting the appropriation, the $100 million and the $120 million from the $237 million, unless we have the authorization requested in this legislation, we will only have $17 million that we could request for appropriations in fiscal year 1983.

So this is a key bill. Without this bill the stockpile will come to a complete halt.

Senator HUMPHREY. I understand. The issue of the silver sales is controversial and I want to come back to that in just a moment. Let me ask you about another matter first.

As you know the House Committee on Armed Services defense industrial based panel recently published a report December 31, 1980, in which among other things it states that during the 1960's and 1970's large sales were made from the stockpile. Frequently the sales were made for the purpose of helping to balance the Federal budget. Instead of being used to buy badly needed materials, these sales were transferred to the general fund of the U.S. Treasury for other purposes.

Can you tell us more about that and what we can do to prevent that? I do not think we have to worry in the case of the present administration, but it seems to me a real violation of the purpose obviously of the stockpile, not to mention the trust. Can you tell us something about that?

Mr. MARKON. Yes. That was true. I think 1938 was the first stockpile legislation. That bill was amended in 1946 and recently in 1979. Prior to the current law, the 1979 act, which is Public Law 96–41, receipts from the sale of excess commodities would go into miscellaneous receipts of the Treasury. So it became obvious that if you wanted to generate more receipts to help balance the budget, you accelerated the sales.

In this process the planning factors must be considered. The first planning factor for the stockpile was to prepare for a 5-year war. This covered a period 1946–58. This planning criteria changed to a 3-year war in 1958–73.

Senator HUMPHREY. Do you know what the basis was for that change? Was it well justified?

Mr. MARKON. It was based on various studies jointly sponsored by the administration and there was some political consideration.

But in the next planning change in 1973–76, the criteria was reduced to 1 year. So this in effect made excess two-thirds of all of the stockpile commodities that were up to goals.

Senator HUMPHREY. What was the basis of that change, do you know?

Mr. MARKON. I can only speculate on that, but I think the House Armed Services Committee language and the testimony that we had in the 1979 act all referred to that 1 year criteria. Congress stopped all disposals until they revised the Stockpile Act to look at the planning. In the present law a 3-year period is provided for. So now it is a matter of legislation. Congress also provided in the law that the receipts of the proceeds will go into the transaction fund and not in the miscellaneous receipts.

Congress in effect protected the money that is generated and they also limited the ability of anyone, any administration, from revising the goals for purposes that are not essentially in our Nation's defense interest.

Senator HUMPHREY. Revising the goals on a broad scale, that is changing the scenario, that has been done; right?

Mr. MARKON. The 3-year period is prescribed by law.

Senator HUMPHREY. But what about the individual stockpile levels?

Mr. MARKON. These are determined by interagency committee, and I believe the Federal Emergency Management Agency representatives will be here and they will discuss that. This is basically their responsibility.

But I can say the law requires that a report be filed with the Congress. And if the goals are materially changed in any new planning, the Government or the administration must advise the Congress and give them 30 days before this becomes effective. So Congress has means to oversee the planning factors as well as the buying and selling aspects of the program.

Senator HUMPHREY. From the same report: "The panel believes that current stockpile goals are much too low." It did not say more than that. What is your view of the situation?

Mr. MARKON. I would, if you have no objection, defer to FEMA on that. They are responsible for setting the goals and it is a rather involved process. I am sure that they will explain this in detail for you.

The General Services Administration's role in the stockpile is that of the more or less physical manager. We do the buying and selling. We do the estimating on the income. We do the storage and the shipping and the receipting of the commodities into the stockpile.

Senator HUMPHREY. I understand. Thank you.

The administration has requested $100 million in new money. Is that correct?

Mr. MARKON. No. The current appropriation is $100 million. The 1982 request is for $120 million.

Senator HUMPHREY. This is certainly a step in the right direction in that there have not been, as far as I know, any requests for new appropriations for quite a number of years and yet at the same time, considering the need, it is not that large a step.

How are we going to address this huge deficit of billions of dollars beyond the capability of just transferring things around within the stockpiles—that is, selling some excess things to buy other needed

things? We really need to go far beyond that; do we not? How are we going to do that?

Mr. MARKON. I think the Stockpile Act developed the concept of trying to restructure the stockpile by the receipts of the excess commodities. At the time, it was noted that we had about 50 percent of value commodities that were excess compared to what we would need to acquire. So it more or less deferred the question on how you are going to fund the remaining requirements of the stockpile.

What we are asking for now is I think, the biggest request for authorization for appropriations—that is more than half of the value of the excess, we need to get the money and to start the restructuring process. Once the restructuring process starts, we will be in fiscal 1985 or 1986 before we would have to consider alternative funding or secondary sources of funding for the stockpile.

Senator HUMPHREY. I have just one last question. Do you feel that the GSA is the best place to have responsibility for managing—that is, managing the physical assets? Would it not be better to have it in the Department of Defense for instance?

Mr. MARKON. I can give you my view of that, but you will have to accept it as prejudicial.

But from the very beginning of GSA in 1949, we have had that responsibility. The GSA has been the fiscal agent or the commodity agent for the Government in stockpiling since 1949. We have a tremendous record. GSA is not that closely involved with the industry planning.

For defense purposes and for FEMA purposes they must share a lot of confidential information with industries so that they can have the data they need for planning purposes. This sometimes creates conflicts. GSA, not being involved in that process, is in a better position to deal at arm's length when we come to the buying and selling of commodities.

So because of our remoteness from those confidential relationships with the industry, I think we have a situation where we can avoid the conflicts and those problems that arise from these implications.

Senator HUMPHREY. Very well. Thank you, Mr. Carmen and Mr. Markon, for your testimony and for your time this morning.

Mr. CARMEN. Thank you, Senator.

Senator HUMPHREY. Our next witnesses from FEMA are Paul Krueger, Director of Resources Preparedness Division, and General Bennett Lewis, Executive Deputy Director of the Federal Emergency Management Agency.

Good morning, General Lewis. Do you have an opening statement?

General LEWIS. Sir, I do.

STATEMENT OF MAJ. GEN. BENNETT L. LEWIS, USA, EXECUTIVE DEPUTY DIRECTOR, FEDERAL EMERGENCY MANAGEMENT AGENCY

General LEWIS. Mr. Chairman, it is a pleasure to be here today and to represent the Director of the Federal Emergency Management Agency, Gen. Louis O. Giuffrida.

The Federal Emergency Management Agency was created to improve capabilities for the management of and response to emergencies

of all types. FEMA is responsible for emergency-related activities embracing the full spectrum of mitigation, preparedness, response, and recovery. As you noted, I currently serve as the Agency's Executive Deputy Director.

As a matter of high-level White House priority, FEMA is working on programs relating to the Nation's ability to mobilize its industrial, manpower, and material resources in time of national emergency. On March 13 of this year President Reagan said, and I quote:

> It is now widely recognized that our Nation is vulnerable to sudden shortages in basic raw materials that are necessary to our defense production base.

Political and economic actions of other nations can have substantial impact on U.S. industry. We have seen the problems that shortfalls can produce as happened in the oil embargo of the early seventies. The national defense stockpile is a major mitigating resource in the event of a material shortfall in a national security emergency. Stockpile inventories maintained at appropriate levels are important to the survivability of the Nation. The basic policy functions with regard to strategic and critical materials that are assigned by law to the President have been delegated by him to FEMA.

Less than 2 months after taking office, President Reagan directed action on the stockpile saying, and I quote again, "This overdue addition to our stockpile constitutes a necessary hedge against any supply disruptions." Senate bill 906, the bill sponsored by the administration that you are considering today, was formulated in accordance with the procedures in the Strategic and Critical Materials Stock Piling Act as amended by the 96th Congress.

S. 906 is a plan of action in response to the President's direction which provides for the purchase of materials needed for the stockpile and the sale of materials that we have determined are excess to the U.S. national security needs. Funds for the purchases will be generated from the sale of the excess materials. All of those materials we propose to buy would not be available in sufficient quantities to meet national security needs.

By law, we need congressional approval for both appropriations to purchase the needed materials and for disposal of the excess materials. S. 906 requests the authority to appropriate approximately $2 billion to purchase and authority for disposal of seven commodities with estimated revenues of that same $2 billion.

I would like to comment briefly on another bill that you mentioned in your introduction. That is Senate bill 1338. This bill would require stockpile goals to be set based on a formula. Materials would be assigned to three classes depending on the extent to which they are obtained from foreign sources under normal peacetime conditions. The simplicity of this formula makes it very appealing. However it would base stockpile goals on commercial import trends rather than national security requirements.

There is a provision for exception to this approach. But FEMA believes that exceptions will be more numerous than the rule when based on emergency requirements. The system we are now following, although it is complex, begins with projected national security requirements and derives material requirements to meet those needs. We believe this approach is more in keeping with the law.

In 1979, the General Accounting Office issued a report. Its number is LCD–79–410 and it is entitled "National Defense Requirements for a Silver Stockpile." I would like to quote from that report. GAO stated:

In our opinion the methodology,

Here they mentioned the Federal Preparedness Agency (FPA), one of the predecessor elements of FEMA—

this methodology used to determine stockpile goals is a reasonable approach representing a variation of the generally accepted state of the art for this type of economic analysis. Judgmental inputs to the model and modifications to model results are made by FEMA in order to more closely approximate the many complex interrelationships that would be present in a wartime economy. Although these inputs are subjective, their credibility is enhanced through independent formulation by the separate agencies involved and final review and approval by the Interagency Stockpile Goal Review Committee.

The agencies that are represented on the committee referred to are: FEMA, which chairs the committee; the Departments of Defense, Commerce, the Interior, Treasury, State, Energy; the Office of Management and Budget; the Central Intelligence Agency; the General Services Administration, and the National Security Council.

Because we believe the existing methodology, although complex, best provides for national security and because the procedure employs extensive interagency coordination, FEMA does not support S. 1338.

With congressional intent as evidenced by the passage of the revised Stockpiling Act and the current renewed interest in the stockpile, this administration is beginning the first major acquisitions program for the stockpile in over 20 years. We appreciate this mutual interest in the stockpile program and look forward to working closely with the Congress.

At this time I would like to introduce Mr. Paul Krueger who is the Assistant Associate Director for Resources Preparedness within FEMA. In this position Mr. Krueger is assigned the policy and planning responsibilities in the Strategic and Critical Materials Stock Piling Act.

Mr. Chairman, with your permission Mr. Krueger will give a short prepared statement after which we will be pleased to answer any questions you or anyone else has on FEMA's view of either S. 1338 or S. 906.

Senator HUMPHREY. Thank you, General Lewis.

Mr. Krueger?

Mr. KRUEGER. Thank you. I would like to abstract from my prepared testimony rather than read the whole thing.

Senator HUMPHREY. Fine.

[The prepared statement of Paul Krueger follows:]

PREPARED STATEMENT OF PAUL K. KRUEGER, ASSISTANT ASSOCIATE DIRECTOR FOR RESOURCES PREPAREDNESS, FEMA

Mr. Chairman and members of the subcommittee. Thank you for this opportunity to discuss with you the national defense stockpile program and specifically the administration-sponsored bill S. 906 and Senator McClure's bill S. 1338.

The primary purpose of S. 1338 is to prescribe the method for determining the quantity of any material to be stockpiled under the Strategic and Critical Materials Stock Piling Act. Under S. 1338 the degree of import dependency would be the primary basis for assigning the stockpile materials to one of three classes: A,

B or C. The stockpile goals then would be based on three years' worth of net imports for those materials assigned to class A; two years of net imports for class B materials; and one year of net imports for class C materials The actual "year" figures would be the average of a five-year base period preceding the calculations which are to be made at least once every four years.

This procedure, according to Senator McClure's speech of June 8, 1981, would eliminate fluctuations in the goals while providing the materials needed in times of emergency. While the simplicity of this methodology is appealing, our analysis of the stockpile goals generated by this proposal indicates that it may not yield the desired results.

The most serious shortcoming from the standpoint of the national security is that S. 1338 does not take into account factors that alter our material requirements in wartime and/or national emergency conditions. In short, it does not take into account the many differences between wartime and peacetime economies. Among the factors omitted are:

Shifts to a more materials-intensive industrial base; recognition that some foreign sources of supply are accessible in wartime, and for those that are, higher-than-peacetime rates of supply can be expected; changes in civilian consumption patterns away from durables and into nondurables and services; substitution possibilities; and expanded production of materials that would result, in some cases, from increased demand.

Senator McClure, in introducing this legislation, noted quite properly that wartime conditions require sharp cutbacks in the production of automobiles, household goods and residential construction. Our stockpile goals are based on estimates that take into account the following factors: (1) stringent limitations on the levels of personal consumption expenditures; (2) restrictions on the proportions of consumer expenditures on durable goods; (3) restrictions on the level of residential investment; and (4) expected material substitution possibilities. Thus, our present stockpile goals are established after adjustments for "belt-tightening" in the economy.

Material requirements under emergency conditions do indeed change markedly. For example, copper consumption increased 57 percent during World War II, 35 percent during the Korean conflict, and 25 percent during the Vietnamese conflict. Under our current planning assumptions, we believe that wartime requirements in the future for copper will increase by approximately 54 percent. The goals for copper that would be established by S. 1338 would not anticipate the increased requirements associated with a war.

To illustrate, during the Vietnamese conflict in 1965 and 1966 we released over 550,000 short tons of copper from the stockpile. Had we been employing the rules of S. 1338, our stockpile would have had only 263,000 short tons as a class C material. The procedure defined in S. 1338 would not have provided enough copper to meet our defense needs at the time of peak requirements during the Vietnamese conflict.

Present stockpile policy and the annual materials plan process resulted from an intensive interagency study of stockpile policies and procedures that consumed, as best we can estimate, about 15,000 man-hours. One of the methodologies evaluated in this review was an "import dependency approach" similar to the system advocated by S. 1338. It was rejected because peacetime patterns do not reflect wartime demand. Nor do they accurately reflect the material-savings potential in the economy under wartime conditions. The present policy guidance and planning process was selected by President Ford, reaffirmed by President Carter, and is supported by President Reagan.

I should also mention that the annual materials plan is developed as an interagency process. The interagency committee examines the proposed stockpile actions with respect to strategic implications, international economic and political impacts, market impacts, and domestic economic and budgetary impacts. In the import-dependency approach of S. 1338, we do not perceive a comparable procedure for lessening the market impact of stockpile actions. Instead, the cyclical movements of peacetime net import levels will determine the swings in the levels of goals for most materials.

The administration-sponsored bill, S. 906, is the legislation to implement the fiscal year 1981 annual materials plan. It would authorize disposal of excess mercury, mercuric oxide, diamonds, iodine, mica, and silver. This bill would also authorize the appropriation of $2 billion for future acquisitions. The administration believes that stockpile acquisitions are important. At current acquisition rates, it would take 100 years to fill the goals.

About one-half of the needed materials can be acquired with funds from the sale of excess materials. However, it is important to realize that 85 percent of this excess or approximately $6 billion consists of silver and tin. Clearly, we must sell silver and tin if we are to effect any meaningful restructuring of the stockpile. We have sufficient authorization for the sale of tin. We now need authorization for the sale of silver.

The argument is made that we should retain the silver as a national asset and a store of value. Our 140 million troy ounce inventory, however, would not help us to put one more jet fighter in the air, or send one more ship to sea, or place one more man in the field in time of national emergency. On the other hand, additional cobalt, titanium, or our other high priority items that we would like to purchase for the stockpile would help to accomplish these defense aims. In fact, the lack of cobalt, titanium, and other stockpile materials seriously hampers our ability to pursue defense programs during an emergency. Well-intentioned people who would prevent the sale of silver (citing the interest of the national defense) are instead preventing these needed enhancements to the national security.

This completes my prepared statement.

STATEMENT OF PAUL K. KRUEGER, ASSISTANT ASSOCIATE DIRECTOR FOR RESOURCES PREPAREDNESS, FEDERAL EMERGENCY MANAGEMENT AGENCY

Mr. KRUEGER. I would like to thank you for the opportunity to discuss with you the national defense stockpile program and specifically the bills before this committee.

As General Lewis stated we do not believe that S. 1338 fully provides for the national security needs. In our view, the most serious shortcoming from that standpoint is that S. 1338 does not take into account the factors which alter our material requirements during wartime or national emergency conditions. In short, it does not take into account many of the differences between wartime and peacetime economies. This is a point that was brought up in that GAO report mentioned.

Among the factors that are omitted are: During wartime we shift to a much more material intensive industrial base; some foreign sources of supply, particularly those located closely to the United States such as Canada, are accessible during wartime. So even though we are importing, certainly that does not mean that we are to view imports from Canada as we do from other parts of the world.

Other factors that change are shifts in civilian consumption patterns so that there is a much smaller consumption of consumer durables. There are many possibilities for substitution. However, for many of the defense-related materials that would go into defense equipment such as tanks and planes we expect production to be at a much higher rate than during peacetime.

Consequently if we do not stockpile for that higher rate of production, we will not be able to sustain those rates needed to successfully prosecute a war effort.

I would like to turn briefly to discussing what has happened in the past during wartime. If we look at copper for example, during World War II copper consumption increased some 57 percent. It increased 35 percent during the Korean War and 25 percent during the Vietnamese conflict. During World War II there were no stockpiles. We found ourselves using silver instead of copper just to conserve on copper. We made steel pennies instead of copper pennies. We made silver nickels instead of nickels which largely contain copper.

So for many of these more ordinary materials which we use every day, when we get into a national security situation, the demand for these materials accelerates tremendously. We feel that if we base stockpile goals on normal peacetime rates of consumption, we are seriously underproviding for critical national security needs.

With regard to the other bill before this committee, we recognize that the silver disposal is controversial. I will just refer back to the example I mentioned. In World War II, silver was one of the surplus commodities that we had in this country. We used 450 million ounces in the aluminum industry to replace copper bus bars. We needed the copper for artillery shells and for communication wires. It made sense to use silver to replace copper in situations like that.

Much of the silver used today is used in what I will call luxury items of consumption. These would include things like jewelry, silverware, commemorative coins, medallions, things of this sort. It is the largest single user of silver. There are some strategic uses, particularly in the electronics area, and in the area of photography for photoreconnaissance.

But currently the Department of Defense on an annual basis uses about 6 million ounces of silver. Even under the most stringent wartime conditions, silver used by the Department of Defense would not exceed some 40 to 45 million ounces. And over a 3-year period of time we estimate the national security requirements for silver to be a little over 500 million ounces.

We believe that most of those requirements can be met from nearby sources of silver such as the United States, Canada, and Mexico. If we count all of the possible available supplies of silver during war, we estimate that there would be almost 700 million ounces of silver available to the United States. This means that silver is clearly in excess of our national security needs.

On the other hand, as you mentioned before, the stockpile is seriously in deficit for many materials, particularly those materials which are vital to aerospace and aircraft industries. We are seriously short of titanium. We are seriously short of cobalt. We are seriously short of materials like tantalum and the other high technology materials.

Unless we can sell off the excesses of our luxury materials such as silver and use those proceeds to buy these more needed materials, we really are not enhancing national security. With silver in the stockpile we cannot put one more airplane in the air, or one more jet fighter up. We cannot add any more to our naval forces. We do not help the soldier in the field. We cannot say that about materials like tungsten, titanium, and cobalt.

So we believe it is a matter of priority to start redressing the stockpile imbalances. We believe that S. 906 is an action plan which will get this done.

Thank you.

Senator HUMPHREY. Thank you, Mr. Krueger.

How much silver are you proposing to sell?

Mr. KRUEGER. The administration requested a total of 139.5 million ounces, and estimated that we would sell approximately 1 million ounces a week. So that amount would cover about a 2½-year period of time.

Senator HUMPHREY. Presumably this 139.5 million ounces is excess over what our security needs require.

General LEWIS. That is correct.

Senator HUMPHREY. How did we come to have so much extra silver in the stockpile? There is no stated need for stockpiling silver; is that correct?

Mr. KRUEGER. Yes. When the United States demonetarized silver, the Congress as part of that action transferred 165 million ounces to the stockpile. So the silver came to the stockpile in 1965 as a matter of legislation.

For most of that period of time we have been trying to introduce legislation to get rid of that silver. It was transferred originally as a hedge. It was not clear what the national security requirements were. Ever since 1973, I think, legislation has been introduced to sell off some of the silver.

Senator HUMPHREY. What became of the other 25 million ounces?

Mr. KRUEGER. Congress passed a law, I think in 1970, which transferred 25 million ounces from the stockpile to the Treasury. That silver was used to mint Eisenhower dollars containing 40 percent silver.

Senator HUMPHREY. So the silver came into this strategic stockpile simply because that was a good place to park it.

Mr. KRUEGER. I think there was a lot of uncertainty. Up to that time the U.S. Treasury had very large stocks of silver. Because of these stocks, there was no real need to consider other sorts of stockpiling. When the decision was made to demonetarize silver, I think it was added just as a hedge to insure that if we needed it, it would be there.

Up to that point in time there was no real free market trade in silver. All of the silver traded through the Department of Treasury. It was difficult to tell what the industrial requirements would be once this became a free market item.

Senator HUMPHREY. The funds from this sale, if it occurs, then will in essence be a windfall to the strategic stockpile in that they were never appropriated for the purchase of strategic materials by Congress.

Mr. KRUEGER. Yes, sir.

Senator HUMPHREY. As you know, part of the controversy is over whether we ought to be selling precious materials that one day might be used to return to a convertible currency. I intend to look into it, but that is part of some of the objections that are raised.

We could presumably be doing the same thing with gold. We could transfer gold into the strategic stockpile, and say that we do not need it for strategic materials, so we will just sell it off. It seems to me a backdoor way of financing the strategic stockpile. Presumably we could sell off other assets, transfer them first to the strategic stockpile and then sell them off. It is not a very straightforward way of doing business, it seems to me.

Referring again to the report of the Defense Industrial Based Panel, House Armed Services Committee, the panel stated that it believes that current stockpile goals are much too low. What is your response to that?

Mr. KRUEGER. I think that it is not a question of whether the stockpile goals are too low. Clearly the inventories in the stockpile are too low.

Senator HUMPHREY. That is not what they say here. There is no one to contest that, that the stockpiles are too low in relation to the goals. But the panel believes that even the goals are too low, much too low.

Mr. KRUEGER. I would disagree with that. I believe that perhaps if you would ask the Department of Defense when they testify, I think they would disagree with that as well.

It is very prudent planning which goes into this which tries to balance out the factors. A number of people think our stockpile goals are too high.

Senator HUMPHREY. Such as whom?

Mr. KRUEGER. I think for instance the bill which is currently before this committee would certainly reduce many of the stockpile goals.

Senator HUMPHREY. This is a report of a panel in the House of Representatives, members of the Committee on Armed Services. That carries a lot of weight.

We will be submitting a number of questions and requests to you for clarification. I want to pursue this matter further, how you calculate the goals, but we will do that for the record.

Carrying this just a little bit further before we turn to something else, as you know, Gen. Alton D. Slay presented an excellent paper to a conference at the Tufts University about 1 month ago. To quote from that report, again on the subject of the adequacy of our stockpile goals: Stockpile goals are generally established based on a projected 3-year demand. Considering the fact that we imported $29 billion worth of nonfuel minerals last year, one could conclude that our stockpile goal should be at least three times that amount.

Would you comment on that?

Mr. KRUEGER. Our biggest single source of imported nonfuel minerals is Canada. For our planning purposes we consider Canada to be a secure source of supply. There exist a number of bilateral agreements with Canada regarding national security and including one which specifically addresses the point of strategic materials.

Senator HUMPHREY. If you subtract what we purchase from Canada in nonfuel minerals from the $29 billion, what would that leave?

General LEWIS. We would have to provide that for the record.

Senator HUMPHREY. But can you give us a rough idea?

Mr. KRUEGER. I would think that it is about $10 billion we import each year from Canada in nonfuel minerals, maybe as much as $15 billion.

Senator HUMPHREY. Your Agency put out a press release on March 13 of this year which among other things stated that in recent years supplies of cobalt have been interrupted twice. Can you tell us something about that?

Mr. KRUEGER. Cobalt is mined principally in Zaire, a country in Central Africa. The mining district is located deep in the interior of Zaire. In 1976, the principal overland route to the mining district went through Angola and that rail line was disrupted during the Angolan war. It took a considerable amount of time before alternate transportation links could be established. I should note that the railroad that was severed in 1976 has not reopened since then.

In 1978, through a variety of reasons, but at least some associated with an invasion from Angola into the mining districts of Zaire, cobalt

supplies were disrupted. Cobalt production stopped. Many of the Belgian and French nationals who were working in that area as technicians left the country, and it took time to reestablish mining there. It was the second disruption.

Senator HUMPHREY. What was the practical effect? Was there any release from the stockpile of cobalt at that time? Or was there enough in the pipeline to handle the shortage?

Mr. KRUEGER. In the 1976 case, at that time the new stockpile goals had not been established. Congress had authorized sales of what was then excess cobalt. GSA through its sales program was able to mitigate some of the impacts of that shortage. Those sales were stopped before the new goals were announced in anticipation of which way things were going, given the Presidential decision on stockpiling. That is what happened in 1976.

In 1978, extensive use was made of the defense priority system. The principal cobalt supplier allocated cobalt to his commercial customers. There was some impact perhaps on delivery times for items using cobalt. The price went up significantly. The price went from $6.85 a pound to $25 a pound in a 9-month period of time.

There was some substitution where substitution could be done easily, particularly in the use of magnets. But I think we are still feeling some of the pinch of that 1978 disruption in terms of leadtimes and in terms of increased prices.

Senator HUMPHREY. How long has FEMA had responsibility now for management of the stockpile?

Mr. KRUEGER. We do not manage the stockpile per se.

Senator HUMPHREY. I mean in setting policy.

Mr. KRUEGER. FEMA or its predecessors have had that responsibility since 1947.

Senator HUMPHREY. You have not had great success, have you, in bringing stockpiles up to stated goals? Why is that? And what can Congress do to correct the situation?

Mr. KRUEGER. I think the easy answer is to send money.

Senator HUMPHREY. That is true, but apparently the money is not being sent because Congress has not been sufficiently impressed with the need.

Mr. KRUEGER. With the change in administrations, and the renewed interest at the very highest level in the administration on achieving national security for not only the direct defense needs but through the national industrial base, increased emphasis not only in the Congress but also in the administration and the public at large, recognizing the needs and vulnerabilities in the strategic material area, I think we are on the verge of seeing some real breakthroughs here.

Senator HUMPHREY. I hope you are right. But the fact is that no money has been requested by the various administrations from Congress. Apparently FEMA and its predecessor, FPA—what does FPA stand for?

General LEWIS. Federal Preparedness Agency.

Senator HUMPHREY. Apparently they were not successful in impressing upon the various administrations the need to request money.

Mr. KRUEGER. Over the last 4 years some $600 million was requested in budgets for the stockpile.

Senator HUMPHREY. Was that requested by the administration?

Mr. KRUEGER. Yes. In a combination 1978–79 supplemental budget action, the request was just under $300 million. In 1980, the request was $177 million. For fiscal 1981, the request was $149 million. The House reduced our request of $149 million to $100 million. The Senate reduced that request to $50 million.

You are correct that we have not been very convincing before Congress.

Senator HUMPHREY. I am not trying to be difficult. I am trying to get some insights into the situation perhaps so that we can propose some beneficial changes.

For instance, could not the matter of the strategic stockpile receive greater attention and priority if policy were under the Department of Defense and those requests were coming from the Department of Defense rather than through FEMA? I do not expect you to agree with that, but it is a thought.

Mr. KRUEGER. I think General Lewis should answer that.

General LEWIS. I do not think it is a function of the agency that has the responsibility. Defense has not been fully successful in devoting the required attention on a number of defense-related areas where it has had primary responsibility.

I believe the breakthrough that Paul Krueger alluded to is the awareness now of our dependence on foreign sources of material. By the way, it is not just defense dependence. It is a national dependence. In many of these areas the stockpile is needed to keep the economy going too. Without a strong economy on the civilian side you are not going to have a strong defense. I think that would be the strongest argument for putting many of these responsibilities in an agency other than the Department of Defense.

Defense's principal focus should be on insuring that we have the strongest military capability. Others should be responsible for making sure we have a strong national capability.

Senator HUMPHREY. True, but at the same time a request coming from FEMA, a request coming from an orgaization that has responsibility for disaster relief, somehow it does not seem to be taken as seriously as a request in a national security frame, does not seem to be taken quite as seriously as similar requests coming from the Department of Defense.

General LEWIS. That could be. If General Giuffrida were here he would say that is FEMA I you are describing. FEMA I is used to describe the organization during its first 2 years of existence when in fact it was having a hard time getting its five separate groups to operate as one. But he has had specific instructions from the President and Mr. Meese to make FEMA perform as it was intended. I believe you will see some changes.

Senator HUMPHREY. I am sure we will. I just hope that they are great enough.

Thank you. We will now hear from Richard Donnelly who is the representative from the Department of Defense. His position is Deputy Director, Production Resources, Office of the Deputy Undersecretary of Defense—Acquisition Policy.

Good morning, Mr. Donnelly. Do you have a statement?

Mr. DONNELLY. Good morning, Mr. Chairman. Yes, sir.

STATEMENT OF RICHARD E. DONNELLY, DEPUTY DIRECTOR, PRODUCTION RESOURCES, OFFICE OF THE DEPUTY UNDER SECRETARY OF DEFENSE—ACQUISITION POLICY

Mr. DONNELLY. Mr. Chairman and members of the subcommittee, I appreciate this opportunity to appear before you in connection with your deliberations on Senate bills 906 and 1338. Both of these bills address the national defense stockpile upon which our Nation's industrial base must ultimately depend in a national emergency.

It is easy to visualize, I think, the increased industrial production necessary to meet a wartime effort: Bullets and bombs moving on conveyors, assembly lines of aircraft and tanks, and ships being launched and outfitted for duty. Most of us have a pretty good mental picture of the final products derived from a complex industrial effort.

But unfortunately far too few Americans are aware that the manufacturing foundation of our highly interdependent economy is traced to a minerals resource base. Our industrial base has become critically dependent upon imports of critical commodities. We in the Department of Defense are not immune to import dependence. Most defense weapon systems are not produced in a captive, separately, Government-owned industrial base. On the contrary, they are produced by the civilian sector which is becoming increasingly dependent upon imports.

Therefore, to promote sufficient domestic production to meet national security requirements during a national emergency, we must stockpile strategic and critical materials in the right forms and in the right quantities. We must consider S. 906 and S. 1338 with the same objectives in mind.

Since S. 906 supports national defense stockpile initiatives, the administration supports passage of S. 906. The provisions of this legislation authorize necessary transactions for the acquisition and disposal of strategic and critical materials for the national defense stockpile.

We believe it is sound management practice to dispose of excess iodine, industrial diamond bort, mercuric oxide, mercury, mica, and silver. It is particularly good management to dispose of unneeded excesses when the results of these efforts are connected with the acquisition of other badly needed commodities identified by the interagency annual materials plan process.

As pointed out by previous witnesses, the administration opposes S. 1338. The provisions of this legislation lead to the determination of stockpile quantities based upon domestic peacetime imports and do not consider the increased demand expected during war. The basis for a national defense stockpile is the expected consumption during a mobilization effort. Therefore the methodology should be based upon wartime demands.

Clearly the Nation's industry activities will consume far more strategic and critical materials during a heated wartime economy, than during an ordinary peacetime business cycle. Therefore we must plan for the stockpile quantities we actually expect to consume during mobilization, and not base the size of our stockpile on something far less than what we actually expect to need.

Let me just illustrate briefly how S. 1338 falls short of meeting stockpile needs. Our ammunition plant at Scranton, Pa., is operating as a warm base. Capital assets such as buildings, industrial plant equipment, production equipment and machinery are fixed. To increase production we increase two variable inputs: Manpower and material. The manpower would increase from 697 currently employed to 2,231, a 220-percent increase. The raw material input would also increase appreciably since the accelerated production of ammunition would depend upon it. A stockpile based on S. 1338 methodology assumes peacetime consumption, and would not provide for mobilization needs, including that type of ammunition.

Similar mobilization conditions would exist at other industrial plants. The Chrysler-operated M–1 tank work force at Lima, Ohio, would increase by 91 percent from 834 to 1,400 during mobilization. The General Dynamics work force at Fort Worth, Tex., where the F–16 is manufactured would increase by 74 percent from 14,350 now employed to 25,000 during mobilization. These and many others would be increasing production to approach maximum capabilities if required.

These capital assets and manpower need the raw materials in proper form and quantity to meet assigned production schedules. The Federal Emergency Management Agency through the use of stockpile models determines the form and goal for each commodity. DOD provides FEMA estimates of wartime military hardware production requirements, estimates of shipping losses, information on scenario characteristics and other defense-related factors.

The direct defense requirements are then combined by FEMA with the wartime requirements of the civil sectors of the economy. Where projected wartime supplies are determined to be inadequate, a stockpile inventory goal is established. This methodology is consistent with national stockpile objectives.

In summary, I wish to reaffirm our desire for prompt sales of materials no longer needed and acquisition of materials for which high priority deficiencies currently exist. Simply stated, the acquisition of needed materials can be managed efficiently through the use of funds generated from sales of materials which are clearly excess to national defense requirements.

Mr. Chairman, improvement in the condition of the national defense stockpile is an important objective in the Department of Defense action plan to improve industrial responsiveness. It is time to move forward and implement these long overdue stockpile improvements which will enhance our industrial readiness and the national defense.

Senator HUMPHREY. Thank you, Mr. Donnelly.

Mr. DONNELLY. Thank you.

Senator HUMPHREY. Why don't we ask the other witnesses to come up now and take part as a panel for the remaining portion of this hearing.

Mr. Donnelly, let me return to you. I asked the other witnesses what they thought of the Defense Industry Based Panel, the Committee on Armed Services, House of Representatives report, which concludes that our stockpiling goals are much too low. From the point of view of the Department of Defense I am not sure it is. I can understand the situation in which you find yourself part of an admin-

istration. You do not just represent the Department of Defense. But what is your opinion of this statement? It comes from a very credible source.

Mr. DONNELLY. Our view on that is that, as Mr. Krueger and others pointed out, the stockpile inventory is far short of what we require. The goals are another thing. Our view is that the goals are approximately as required, that they would not have to be raised to that extent.

But I would like to add very quickly here that the stockpile goal is a convenient way to gage the temperature or the responsiveness of our industrial base. It may not be our only avenue here is to fill that inventory. It is a good signal to the Government and the industry on what might be required in the future.

If we have a very large goal for a commodity, then that is a signal that you may want to do some research and development to develop a proper substitute for that commodity. It is a good signal that you may want to engage in other alternatives like expanding domestic supply for a raw material rather than being totally dependent upon overseas sources.

Filling the goal is one way but there are other avenues that I think this signals.

Senator HUMPHREY. Thank you.

General Lewis, you are proposing to acquire materials costing more than $2 billion. How did you arrive at that figure?

General LEWIS. If you do not mind, I am going to pass that to Mr. Krueger.

Senator HUMPHREY. All right.

Mr. KRUEGER. At least in part the $2 billion authorization is driven by the value of the materials for which we are requesting disposal. The intent of this committee and its House counterpart was to show a clear connection between stockpile disposals and stockpile acquisitions. In doing this, we feel at least one way is to put not only the disposals in a piece of legislation but in that very same piece of legislation offsetting authorizations to appropriate.

In the planning process we work out how those moneys could be spent in a prudent manner. The Federal Emergency Management Agency chairs a committee called the Annual Materials Plan Steering Committee which looks at current requirements for the stockpile and expected availability of funds that we can spend in the near term. It looks at market conditions and looks at special national security requirements. It is the combination of these factors which pull together budget requests and market plans.

Senator HUMPHREY. So in other words you are just planning to spend everything you can raise by disposing of these other excess items.

Mr. KRUEGER. Our needs are so great.

Senator HUMPHREY. Yes, there is nothing wrong with that.

In that vein, how long do you suppose it is going to take to accomplish both sides of this transaction?

Mr. KRUEGER. Do you mean just in the transaction that is in S. 906 or the whole stockpile restructuring?

Senator HUMPHREY. I mean the selling off of silver and other excess items, if you are authorized to do that, and the expenditure of the proceeds to purchase these other items.

Mr. KRUEGER. I think Mr. Markon can address this better. But with 2½ years for the silver, slightly longer for some of the other commodities, I would think that from my point of view we are talking about a 4- or 5-year timeframe for purchases. So both would take between 4 and 5 years.

Senator HUMPHREY. Mr. Markon, did you want to comment on that?

Mr. MARKON. Yes. The commodities that we have listed in this bill, S. 906, are not the entire excess. For example, in mercury we are asking for authority to dispose of 50,000 flasks. This is about one-third of the excess. So we contemplate coming back and asking for more authority. This is a convenient figure. We sell mercury at about 1,000 flasks a month, so 50,000 flasks would be a 5-year program for mercury. For the iodine, it is probably about a 2-year sales period. So there are various terms for the different commodities over which period of time we hope to generate the $2 billion.

The authorization is for an appropriation. The money still has to be appropriated. Our acquisition plans are limited by the money that has been requested. For 1981 it is $100 million and for 1982 it is $120 million. We do have a little mismatch there which we hope to correct.

Senator HUMPHREY. Why are you requesting authorization of $2 billion when you are requesting an appropriation of only $120 million? It would take a very long time obviously to spend it out at that rate.

Mr. MARKON. Yes. The moneys that are generated from the sale should go into the transaction fund. As Mr. Krueger just indicated, our request in the disposal legislation is for the authorization to have that entire sum appropriated. Otherwise it would be a matter of coming back to the Congress almost every year and having additional hearings that I do not believe would serve any purpose. The authorization merely is saying that if you are going to generate that much income, you are authorized to have it appropriated for acquisition purposes.

Mr. KRUEGER. I think it is also the clear intent of this administration as expressed by President Reagan that stockpile acquisitions are going to have to be accelerated. And this will generate those moneys for the transaction fund so that in fiscal 1983 and beyond we can start moving out at a faster pace than we have been going in the past 2 years.

Senator HUMPHREY. Speaking of the last 2 years or recent history, can you give us some idea of the various transactions taking place?

Mr. KRUEGER. I think Mr. Markon is more familiar with that.

Mr. MARKON. We have yet to complete our first purchase with the $100 million. This money was made available through the continuing resolution, not through an appropriation. So it came to us rather late. We have currently announced and we are analyzing proposals for the purchase of up to 5 million pounds of cobalt. Hopefully we will be able to announce a decision to make the first major acquisition in cobalt in the next several days.

Our activity otherwise has mostly concerned sales. We are selling off commodities, tungsten, tin, and commodities that have been authorized for sale for many years. Some of them are low value and do not generate much income. We are selling other commodities

but they are not stockpile commodities. These are excess personal property commodities. The Department of Energy for example has a lot of mercury that is excess. Those sales programs will be joined together and handled by GSA as one sales program.

Senator HUMPHREY. What number of personnel are involved in this program here in Washington within your office?

Mr. MARKON. Within my office, in the transaction area where we do the buying and selling—this does not count the quality assurance or the storage—we have about 52 to 54 people.

Senator HUMPHREY. In FEMA you have five programs to administer, five areas of responsibility. How many people are working in this one area?

General LEWIS. FEMA comprises what had been five agencies or administrations. I believe we have between 14 and 20 people working in that area.

Senator HUMPHREY. How much money is in the stockpile transaction account at this time, Mr. Markon?

Mr. MARKON. Approximately $150 to $160 million.

Senator HUMPHREY. How is the account which was provided for in the 1979 act working?

Mr. MARKON. How is it working?

Senator HUMPHREY. Yes; how is it working?

Mr. MARKON. So far it is working fine. As I say, we are making our first acquisition, which will be the first drawdown on the fund. It is a matter of fund management. It is a cash flow in and a cash flow out. Managed properly with appropriations from the Congress, it will be very, very effective.

In this respect, I must point out another provision of the law. It says that the activity of the Government, must be conducted, the activities in the sale and acquisition of commodities, in such a way, so as not to cause undue market disruption, and as to be in the best interests of the United States.

Now the commodity markets are cyclical and subject to many, many changes for many, many reasons. So in this respect I think that it is very, very proper and almost essential to give the stockpile broker for the Government, the flexibility he needs to respond to market conditions.

I have in my statement a chart which shows what happened to silver in the last couple of years.

Silver went from $10 up to $50 an ounce. In Mr. Krueger's statement he talked about cobalt where it went from $5 to about $50 a pound. Certainly we do not want to be buying cobalt when it is $50 a pound, and we would like to be selling silver when it is $40 an ounce. This is very difficult to accomplish with all of the restraints that we have.

Senator HUMPHREY. You do not recommend any changes then in the Stockpiling Act, as it affects the transition account? You are satisfied with the way things are working?

Mr. MARKON. Yes.

Senator HUMPHREY. The House Armed Services Committee, as you probably know, has proposed two changes: First, to eliminate the 3-year sunset provision and second, to prohibit sales when the account balance reaches $500 million.

Mr. MARKON. Properly managed, that should be not difficult to accomplish. We can accomplish it under the present limitations or with the House limitation.

Senator HUMPHREY. You have no objection to the prohibition on sales when the account balance reaches $500 million?

Mr. MARKON. I had just stated that the limitations are artificial restraints. I do not know what they accomplish. All it does is make it more difficult for the Government to enter into the transactions that the people responsible believe are timely, appropriate and in the Government's best interest.

Senator HUMPHREY. Under existing law, any funds that remain in the account for more than 3 years are transferred into the Treasury. The House has proposed to delete that provision. Do you want to comment on that?

Mr. MARKON. The money is earmarked. It is like having three accounts. All of the money we generate, in say fiscal year 1980 is put into the 1980 cash drawer. Like most any other business we use the first in, first out method. So, the money that we spend for our first acquisition will be that money that came into the fund at the earliest date. By having a matched program in acquisition and disposal, the money would not be available for a period of 3 years. We would continually be spending money.

Senator HUMPHREY. It is usually out before that.

Mr. MARKON. Yes. That is the way the 3-year limitation works. It drives the process, it accelerates the process because as a manager you do not want to lose any of the funds that have been appropriated. That is a little bit of a restraint. It would be a little better if we could gage our market activities more to suit the market rather than an artificial time barrier.

Senator HUMPHREY. What is the rate of turnover when you sell a commodity, and you put the proceeds into the transaction account? Generally speaking, how long is it before those same dollars are turned over and spent on something else?

Mr. MARKON. Except for silver and tin and tungsten and industrial diamonds, most of the commodities are low in value. So we have to sell an awful lot of mica and we have to sell an awful lot of iodine and everything else to have enough money to buy those commodities that we need which are of generally high value. The world price for cobalt is $20 a pound. So you have to sell an awful lot of these commodities to get a substantial sum of money so you can make a significant buy of cobalt.

In this area we must deal as a wholesaler. It does not serve our purpose to deal in small amounts. When you deal in large amounts, you get the larger discounts.

General LEWIS. Your question was rate of turnover. We have not been buying any so the money has not turned over.

Mr. MARKON. Except for this first buy.

General LEWIS. Except for the first buy that is coming up.

Senator HUMPHREY. That is a good point. Is there not some money that is going to revert to the Treasury by virtue of this 3-year provision?

Mr. MARKON. No, sir. I think with our first buy we will spend all of the money that came into the account the first year.

Senator HUMPHREY. What about the $160 million which is presently in the account?

Mr. MARKON. That came into the account from July 1979. The 3-year period begins from the calendar year 1980. The transaction account was established in July 1979. The first year counts from the following fiscal year, say October. So we are really counting from October 1980 as the first year for the 3-year limitation. This is 1981, so that money is approximately a year to a year and a half old. We have another year and a half to go with it.

Now the $100 million appropriated the money is the fund except for $60 million. The $120 million which we are requesting now will appropriate the remaining funds. The 3-year limitation applies to these appropriations. After the money is appropriated, if so provided in the Appropriation Acts, it is available for a 5-year period.

Senator HUMPHREY. Do you have the authority to invest that money? Does it just sit idle? Do you buy Treasury bills with it?

Mr. MARKON. I do not think any money sits idle. It is in our account just like your savings account in the bank. The bank uses it although your bank book says that you have it. I think the Treasury and OMB puts it to other use.

Senator HUMPHREY. Going back to silver, General Lewis, will you give us justification for your request to sell all silver, that is to retain none for strategic purposes?

General LEWIS. We can give you great detail on the justification. Essentially we looked at all relevant factors: Strategic implications, the military needs over the 3-year period in the event of a war, civilian needs over that same period, the U.S. ability to produce silver, the ability of the other current producers of silver to produce, the subsitute materials that might be applied. The net result of this assessment was the conclusion that we do not require any silver in the stockpile.

There are many Departments in the Government that are involved in the process including Defense, Commerce, the Interior, Treasury, GSA, and State.

Senator HUMPHREY. Who made the decision on the silver sale?

General LEWIS. Do you mean the ultimate decision?

Senator HUMPHREY. Yes.

General LEWIS. It was proposed by FEMA and approved by the administration. FEMA is the chairman of this interagency steering group.

Senator HUMPHREY. You are proposing to sell approximately 140 million troy ounces in 3 years. How can you possibly sell that much per year without severely disrupting the market?

General LEWIS. I would defer that to Commissioner Markon. His people participated in that decision.

Mr. MARKON. It is very difficult to project future activity in the commodity market or the stock market or the bond market, for that matter. These are just estimates that we arrive at.

Senator HUMPHREY. How much of a dent does that make in the domestic marketplace for silver?

Mr. MARKON. We had a program where we sold silver before, and we were able to market approximately 1 million troy ounces a week. The quantity of silver consumed by the United States over a

period of 1 year is greatly in excess of 100 million or the 50 million ounces a year that we are proposing. So this would be a certain percentage of the market.

We would have to market our commodities according to the laws. If we start driving the price down, for example, in getting bids that are too low, we will have to moderate our sales. Hopefully we are able to adjust the effect of our marketing activities by making a decision to sell or not to sell in order to keep the price stable.

Senator HUMPHREY. The average annual silver consumption in the United States is 150 million to 200 million ounces. You are proposing to sell into the market a very considerable amount, relatively speaking. Are you confident that you can sell this in 3 years without disrupting the market?

Mr. MARKON. I am confident we will not disrupt the market. But whether or not we will be able to succeed in marketing the total amount, that is another question.

This brings up by the way what the House has done in its version of the disposal bill. They put a limitation on what we could sell a year. I think this is another artifical limitation. The freedom to the manager to operate in the market so he is not disruptive should be one of the essential ingredients of the disposal legislation. We will try to make a million ounces a week available. We will look at the responses and we will carefully gage our activities and the effects of our decisions to sell or not to sell.

Senator HUMPHREY. How is it decided when a market disruption begins? Do you have some numbers in mind?

Mr. MARKON. There are a lot of people waiting to tell us, and we have been challenged in legal actions for some of our decisions. This is a good judgment question and is very difficult to answer.

Mr. KRUEGER. Senator?

Senator HUMPHREY. Yes, Mr. Krueger.

Mr. KRUEGER. Just as a matter of historical record here, the only other experience was during the late 1960's and early 1970's. GSA acted as the Treasury Department's agent and sold 1.5 million ounces of silver a week for a total of 300 million ounces. During that 3-year time, the price of silver rose, and it ended up higher than it was when the program started.

Senator HUMPHREY. What period of time was that?

Mr. KRUEGER. I believe it was 1969 through 1971.

Mr. MARKON. It was 1968 when we sold 97 million-plus ounces. In 1969 we sold 99 million-plus; in 1970, 75 million; and in 1971 the remaining authorization of 32 million. So we do have some experience in the silver market, albeit in another economic era. I am not saying that we could repeat what we could do in 1968.

Senator HUMPHREY. Have you had a policy of not selling more than 10 or 15 percent of the domestic market for any particular commodities in one year? Has there not been some sort of rule of thumb or policy along those lines?

Mr. MARKON. It is a rule of thumb, not a policy. It is matter of analyzing the market and making judgments of what we can do without being disruptive.

Senator HUMPHREY. But you have sold as many as a million ounces a week in the past.

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Mr. MARKON. Yes; in 1968 through 1971.

Senator HUMPHREY. Was that a bull market for silver? Was there a demand at the time?

Mr. MARKON. Yes. Apparently there was a demand at the time. Of course silver then was selling at $1.93 or $2 a troy ounce. You see this is a different market now. I am not saying here that we can repeat what we did in 1968.

Mr. KRUEGER. But there is a clear history that this has been done in the past in a nondisruptive fashion. We cannot really tell until we actually experience what is happening in the marketplace. But our only prior experience indicated that this is not an unreasonable level of transactions.

Senator HUMPHREY. Who decides when you are becoming disruptive?

Mr. MARKON. Apparently the decision would be with GSA because we are the commodity brokers. We set the rate. If we are disruptive, we would have to modify those rates. So this is a GSA decision.

Senator HUMPHREY. Do you have the criteria to decide it at this point?

Mr. MARKON. I do not think these decisions are susceptible to any kind of formula. I think the criteria would be the factors that affect the market: The supply, the demand, the imports, the price, the responses to our solicitation and also the objections that we get from the market.

Senator HUMPHREY. Mr. Donnelly, what are the requirements for silver from the point of view of the Department of Defense?

Mr. DONNELLY. Our typical take, if there is such a thing as typical, is less than 4 percent of total domestic demand. We are a relatively small taker in the marketplace for silver. In an emergency I would find it very difficult to justify anything more than an additional 5 or 6 percent of domestic demand.

Senator HUMPHREY. What are the principal Defense uses of silver?

Mr. DONNELLY. The main use is in batteries, and of course batteries are found in most of our major weapon systems at one place or another. One of the difficulties we have is computing our requirements for many raw materials, and silver is one of those commodities, because generally speaking we do not buy silver, we do not buy cobalt, copper, aluminum, and so forth. We buy finished weapon systems and equipment.

But in 1977 we came up with an exact figure which was 3.6 percent of U.S. consumption. The batteries represented as I said the largest single requirement during that period of time which was 2 million troy ounces. The batteries would be used in aircraft using silver-zinc batteries for power starting and for emergency power situations, sonobuoys and other digital devices requiring silver oxide battery cells.

Senator HUMPHREY. Mr. Markon, have you been asked by the administration to examine the possibility of returning the silver to the Treasury for the purpose I mentioned earlier? Has there been any discussion in the administration, as far as you know?

Mr. MARKON. As far as I know there has not been. I might say however the legislation that turned the silver into the stockpile from Treasury turned it over at cost. The value is of that date. It was a credit transaction. We still owe the Treasury, I think $1.29 per ounce

for the silver. But there has been no move as far as I know to turn it back or any portion of it.

Mr. KRUEGER. You commented before, Senator, that isn't this a cheap way of funding the stockpile by taking the silver from the Treasury and then using it to fund the stockpile? Before 1979 all of the revenues generated from the sale of stockpile materials went back to the Treasury. So I think the long and the short of it is that this whole thing balances out.

Senator HUMPHYEY. You owe the Treasury $1.29 for each ounce. So when you sell it, if you sell it, you will not be able to keep all of the proceeds, is that right? You will have to pay off the Treasury at that point or not?

Mr. MARKON. This is a matter on which we will have to have further discussion with the Treasury. There is some possibility that we may be able to talk them out of it.

Senator HUMPHREY. Do you have any information, Mr. Markon, on the acquisition cost of that silver? I understand that you are not supposed to sell commodities at a loss to the Government.

Mr. MARKON. Yes. The sales that I mentioned in 1968, we sold the silver at $1.93 and that was $188 million more than what it cost us. In 1969 it was $184 million and in 1970 it was $131 million more. So all of the sales were about twice what we paid for it.

Senator HUMPHREY. How was this $1.29 figure arrived at? Essentially that is the price at which the Treasury transferred it to you. But how much did it cost the Treasury originally?

Mr. MARKON. A lot of the silver was purchased back in the 1880's under the Bland-Allison Acts when the Government was supporting silver. And the inventory price, the cost paid by the Treasury was the price I think that was used.

Mr. KRUEGER. The $1.29 ounce represents the monetary value of silver at that time. It is connected to the bullion accounts of the Treasury. In fact that is where the $1.29 goes, back to the bullion accounts.

Senator HUMPHREY. Mr. Markon, do you make any projections on the future prices of commodities so that you might avoid a situation in which you are selling a commodity for less than it might be worth in a year or two? Do you make any projections?

Mr. MARKON. Not that I would invest my money on. It is impossible to make those kind of projections. We have to look at the decisions that are made at the time they are made. I imagine that in hindsight, looking back over the years, you will find some decisions that today do not look like they are good decisions. But at the time they were made they were very good.

Senator HUMPHREY. It would be nice if we sold silver at $50; would it not?

Mr. MARKON. We had a request to sell silver that the Senate approved. It was the House that refused to go along, if we had that authority we would have been selling silver at $40 an ounce.

Senator HUMPHREY. When it is high it is about $45.

Mr. MARKON. Yes.

Senator HUMPHREY. I would like to turn to the area of tin sales, Mr. Markon. How are the tin sales going?

Mr. MARKON. They are not going as well as expected. We had our authorization to sell tin, and under the International Tin Agreement in which we are a member—it is a treaty obligation—we coordinated our activities with the International Tin Council. That was in January of last year. Because of this coordination process and others, we did not enter the market until July. At that time the market started to deteriorate. Tin was selling earlier in the year for about $8 a pound and it started to go down.

We started a sale of marketing 500 tons every 2 weeks on an auction basis or invitation to bid. This method is unusual and it was unique to the market. It put us in the market on every other Tuesday, and that day may not have been the right day to be in the market.

So because of the disappointments in the response to that method, we advised the committees of Congress that we are going to make a change in our disposal activities and go back to setting an aggressive price and go off the shelf. This was in December of last year.

Now tin, like many commodities, is bought not only in the spot and prompt market but also in the future market. So entering the market in December, you have to allow some time for the future commitments to clear. In about March of this year we started to sell tin, and so far we have sold approximately 900 tons. Even though the market is weak, we are picking up our sales.

It is very difficult to leave a market and to get back in. People establish connections with brokers, with suppliers, and to induce them to come back to you takes a little time. We are being very patient and being very cautious so as not to be disruptive, not to be too aggressive in our pricing. I think so far we have been very successful in avoiding market disruption but not successful in generating a lot of cash.

Senator HUMPHREY. What was the authority you were given with regards to tin sales.

Mr. MARKON. We were authorized to sell 30,000 tons of tin. At the time we were projecting sales of approximately 10,000 tons a year. There was an additional authority in that bill for 5,000 tons for contribution to the buffer stock of the International Tin Council.

Senator HUMPHREY. Would you tell the subcommittee about that Council.

Mr. MARKON. The United States as a party to the International Tin Council has obligated itself to support the Council both by contributions in cash and by contributions in tin.

Senator HUMPHREY. What does the Council do?

Mr. MARKON. The Tin Council is the international forum that was originally organized to stabilize prices and assure an adequate source of supply. Through these agreements they set price ranges at which the price of tin will be supported by the buffer stock manager by entering into the market to become a buyer and also ceiling prices by which the buffer stock manager would enter in and be a seller. Through the buffer stock manager's activity, he would essentially moderate the price to keep it within that range.

Senator HUMPHREY. How did we come to have an excess of tin or for that matter any commodity? Do our industrial requirements change?

General LEWIS. It is substitutes. Tin primarily went to tin cans and now you have a hard time finding a tin can. It is plastic or aluminum or some fiber. Actually our domestic consumption of tin has gone down dramatically over the last several years even though the economy has increased. So it is substitutes.

Senator HUMPHREY. Mr. Markon, in the report language on the Transaction Authorization Act, the committee asked GSA to consult with the sole U.S. producer of tin, Texas City Smelter, as to the plans for tin sales. The Texas City Smelter Corp. informs us by correspondence that they have not been consulted. I think Senator Tower might have an interest in this matter. Can you enlighten us?

Mr. MARKON. Yes. In fact they have recently consulted with us by serving me a copy of a complaint. We have talked to the president of the company. They came to Washington. There has been written correspondence between us and the Texas City Smelter. I think essentially it is not that we are not talking. We are not talking the same language. I think the company's position is really one that cannot be supported, and therein we have our difference. Since this is a matter in litigation, I would rather not get into the details of the merits of their contention or our position.

Senator HUMPHREY. How are the overall goals set? I made several references to the House report which feels the goals are far too low. How do you set these goals, Mr. Krueger?

Mr. KRUEGER. Basically the starting point is the guidance provided by the Congress and the law which says we shall stockpile for not less than 3 years to meet the military, industrial, and essential civilian needs in the Nation during a period of national emergency. This guidance is further elaborated upon by the National Security Council which sets some of the parameters of the war that we are stockpiling for.

We then work with the Department of Defense. As Mr. Donnelly mentioned, the Department of Defense provides us with, given those particular scenarios, what the Defense requirement for weapon systems would be and things of this sort. They provided us with estimates on what shipping losses would be on the high seas. They provided us other information which is peculiar to the scenarios we are talking about.

This basic military type information then is combined with estimates of what a civil economy would look like during wartime making sure to make adjustments for things such as austerity and substitution, which you would expect to take place during wartime. Using these projections of what a wartime economy would be, both civil and military, we make further estimates of what levels of industrial production would be necessary to support this defense effort.

And using, I will call it, materials recipes developed which would indicate amounts of chrome and copper and all of these other materials that go into let's say an aircraft, we know what level of materials production we need for the aircraft industry. We know the material recipes which go into the aircraft industry. We match the level with the recipe to determine what the total requirements are.

We do this for each and every industry and for all of the materials we stockpile. When we add up across all industries, this ends up with

what our wartime requirements are. Working primarily with the Bureau of Mines and the Department of Interior and the Office of Industrial Mobilization, within the Department of Commerce, we make estimates then of what the supply would be. This would include estimates not only of what normal supply would be but what we might expect to occur during wartime.

This supply is heavily discounted. For instance countries that would be located in a war zone are not considered to be sources of supply. Countries which are judged to be either politically unreliable or economically unstable during wartime would not be considered sources of supply. So that supply is discounted for these factors. Further discounts are made for things such as the shipping losses I mentioned.

So on one hand we end up now with what our anticipated wartime supplies are. In the other hand is what our anticipated wartime requirements are. Every time the requirements exceed the supply, that really represents what should be in our stockpile, what the stockpile goal is.

All of this has been done very carefully with models and whatever. But in the final analysis, all of these numbers which are generated go back to the experts in the Department of Defense, the minerals experts in the Bureau of Mines, the Department of the Interior, and the industry experts in the Department of Commerce for a check. It is only after all of these people agree to these numbers that we come up with stockpile goals.

Senator HUMPHREY. It sounds rather ponderous.

Mr. KRUEGER. It is a careful, prudent procedure.

Senator HUMPHREY. Are you familiar with the report of the Industrial Based Panel?

Mr. KRUEGER. Yes, sir.

Senator HUMPHREY. How do you suppose they came to their conclusion and why do you disagree with it?

Mr. KRUEGER. It may be that some of the stockpiles they are referring to are other stockpile goals that the Department of Defense has for other than critical materials and item production.

General LEWIS. I know that there is one major industry that objected to some of the conclusions because they were not counted as a defense supplier. They do not make defense materials at this time, but they certainly are a major producer worldwide of heavy equipment and their capacity was not included. It could be for the same reason, that maybe not all sources of supply were considered.

Senator HUMPHREY. We will pursue that. Clearly by the language, they are talking about the same things that we are examining today.

What role does FEMA have? What alternatives are available to us? Does FEMA have any authority to recommend other courses of action beside buying and selling of commodities? Can you recommend that the Government, for instance, purchase a mine or contribute toward the development of a mine or its capabilities? Are there other alternatives?

General LEWIS. There certainly are. Before I get to what we can do with respect to mines, you should be aware that the goal itself may send a message not only to the Defense Department but also to industry that they ought to start considering substitutes. That has hap-

pened. So we do not automatically buy to the goal once we have calculated it.

By law, we are authorized to encourage the mining industry to open up mines. We have examples where we have been very successful. For details, I will turn to Mr. Krueger. The titanium industry was started from scratch in this country by actions of the predecessor of FEMA.

Senator HUMPHREY. You say you are authorized to encourage. What encouragement can you give them?

General LEWIS. In terms of loans, financial encouragement.

Senator HUMPHREY. Can you expand on that, Mr. Krueger?

Mr. KRUEGER. Title III of the Defense Production Act of 1950 authorizes a variety of incentives to expand domestic capacity.

Senator HUMPHREY. Are they being used?

Mr. KRUEGER. They have not been used and have not been funded since 1974.

Senator HUMPHREY. Have there been any requests for funds?

Mr. KRUEGER. I think that we are trying to work up alternatives to the stockpile for that. It has been very successful in the past: Approximately $500 million in actual expenditures, funded $9 billion worth of industrial expansion.

Senator HUMPHREY. I understand that there is a study underway in the administration to encourage, I suppose with Government money, greater production of cobalt. Can you tell us about that?

Mr. KRUEGER. There is under active study in a number of forums the subjects of the costs and benefits of expanding or providing incentives to expand domestic capacity versus something like the stockpile. From my own point of view, I think that for many materials it may be more cost effective to provide these incentives than to stockpile an equivalent amount. But these have to be worked out on a case-by-case basis, and all of those decisions have not yet been made.

General LEWIS. It is true we are looking at cobalt, and we are looking at guayule, titanium, and refractory bauxite.

Senator HUMPHREY. Mr. Donnelly, do we cooperate or coordinate with our allies with regard to strategic stockpiling?

Mr. DONNELLY. I do not think the law permits us to stockpile raw materials for the allies.

Senator HUMPHREY. But are there no agreements to share to balance things out that you are aware of?

Mr. DONNELLY. If you are talking about the national defense stockpile, the requirements that were generated for the stockpile do not include the requirements of the allies.

Mr. KRUEGER. For instance DOD might be shipping weapon systems to allies. To the extent those weapon systems were produced here in the United States, we would stockpile for that. We do not stockpile for their raw material needs.

Mr. DONNELLY. To the extent that our acquisition of weapon systems and equipment would be sold to the allies or provided to the allies, that is factored in the stockpile requirements process.

Senator HUMPHREY. Are you in a position to comment on the stockpile policies of our allies, Mr. Donnelly?

Mr. DONNELLY. I am not in a very good position. I know that there has been some move toward Government stockpiling on the

part of a couple of countries. But it is nothing close to the effort that the United States has.

Senator HUMPHREY. We will ask the Department of Defense to provide further details on that and some assessment of the adequacy of the stockpiles being maintained by our allies.

[The information follows:]

STOCKPILE MAINTENANCE

Government stockpiling by our allies apparently is inadequate The concept of strategic and critical materials stockpiling, as practiced by the United States, has not been completely adopted by our allies Instead, our allies have relied upon the industrial raw material inventories of private firms as an internal stockpile source given a supply cut-off.

Senator Levin has submitted some questions for the record. In addition I want to enter into the record the report of the Defense Industrial Base Panel, Committee on Armed Services, House of Representatives, 96th Congress, Committee Print Report No. 29; and a paper entitled "Strategic and Critical Materials," by Gen. Alton D. Slay, presented at the Fletcher School of Law and Diplomacy in May of this year.

(Committee Print Report No. 29, the Ailing Defense Industrial Base: Unready for Crisis, is retained in committee files. The speech by Gen. Alton D. Slay, follows:)

SPEECH BY ALTON D. SLAY, GENERAL, USAF (RET) TO FLETCHER SCHOOL OF LAW AND DIPLOMACY, TUFTS UNIVERSITY, 6 MAY 1981

Ladies and Gentlemen: I thank you very much for asking me to be with you today. The topics on your agenda have occupied a great deal of my "worry time" over the past several years, and I welcome this opportunity to share my views with you.

I've been assigned that part of the agenda entitled: "Critical Materials and U.S. Military Vulnerability". One could talk for hours on either segment of that broad topic, but I'll try not to. I like broad topics. Broad topics give me license to zero in on one of my personal gold watches or, alternatively, they allow me to skirt the subject, and perform a tap dance routine so as not to display too much of my ignorance. I'll probably do a little of both today.

Since I've spent a good portion of my life wearing a uniform, it might be logical for you to assume that I'll spend the bulk of my time talking about the "Military Vulnerability" segment of my topic; but I'm going to surprise you.

I'm not going to talk at all about the fact that the overpowering strategic nuclear power edge we had over the Soviet Union fifteen years ago has vanished.

I'm not going to tell you that during the last decade our Armed Forces strength declined 40 percent while Soviet Armed Forces strength grew by 25 percent.

I'm not going to mention the fact that during the 1970's, Soviet spending on things related to military research and development, military weapon systems acquisition, and military facilities, exceeded that which we spent on those things by $240 billion;

Nor will I hint at the fact that last year the Soviets spent $50 billion more on these items than did we—an amount larger than the total Air Force budget.

I won't burden you down with the statistic that the Soviets now have three times as many engineers engaged in military research and development as do we, nor with the fact that they are graduating six times the number of engineers each year that we do.

And I won't even allude to the fact that the military equipment these engineers are designing is highly sophisticated, reliable and effective, or to the fact that the Soviets are efficient producers and their factories are modern and well equipped.

I promise not to tell you that they are currently outproducing us in every single aspect of military weapon production.

And I won't try to support such a statement by telling you about the fact that they now outproduce us 11½ to 1 in armored vehicles and artillery tubes; 18 to 1 in surface-to-air missiles; 3 to 1 in attack helicopters; and 2 to 1 in submarines, naval surface combatant ships, and tactical fighter aircraft.

Also I won't try to confound you with the fact that they've introduced three totally new types of ICBMs since we introduced our last one—the Minuteman III—over 10 years ago; and I won't advertise the fact that they have deployed over 600 new ICBM's since we deployed our last Minuteman III 5 years ago.

Finally, I won't trouble you with the fact that they've commissioned over 60 new ballistic missile subs since we commissioned our last Posedon sub 13 years ago; nor even with the fact that they're building 30 bombers every year and have built almost 600 bombers since we built our last B-52 20 years ago.

I'm not going to talk about any of those things today.

But I will talk about another kind of military vulnerability; in fact I'm going to talk about what some have characterized as an ongoing war—a different kind of war, but still dangerous—a "resource war".

Now any rational discussion of a war has to include, as the very first consideration, the identity of the enemy. You just can't have a war without an enemy.

In our resource war we actually have not one but two enemies. The first is our old familiar global adversary—the Soviet Union—and I'll talk about him, and some of his disguises. For the second enemy I'll steal a quote from a particularly perceptive possum—pogo of the comic strips:

"We have met the enemy, and he is us." and I'll talk a bit about that enemy, and some of his disguises.

I'd like to start this part of my talk with a quote:

"At the present time, the forces of nationalism are potent in almost every country, and their impact upon civilized life has repercussions that affect every commodity and every industry. Endeavors are made today, more perhaps than in any other time in modern history to stimulate reliance upon indigenous resources—materials and industries, and to restrict, for survival, dependence on the flow of imports from foreign lands."

Sounds very topical for this conference. It was made by an Englishman—Sir John Cadman—in October 1933.

I could have used most of his script for my talk today.

It surprises most people, and may surprise you, to learn that every man, woman, and child in the United States today requires 37,639 pounds of minerals each year.

Almost 18,000 pounds of this staggering total is fuel.

Another 18,000 pounds falls in the category of nonmetals—like sand, gravel, stone, cement, salt, and clays.

The remainder is metal. Each of us requires 1,324 pounds of metal each and every year.

Viewed from a different perspective—

Our gross national product is now over $2½ trillion in 1981 dollars. To support such a GNP, we require 250 billion dollars worth of raw materials.

Looked at another way, that equates to about 10 trillion pounds of raw material a year to keep us going.

To bring the point home, that means that for every dollar a person contributes to the GNP, someone has to produce 4 pounds of raw material.

In past times, we in the United States were proud to proclaim that we were basically a self-sufficient nation. If we needed more minerals we mined it, or drilled for it; if we needed more food, we grew it; if we needed more machinery, we built it; if we needed more technology, we invented it.

The case for our agricultural self-sufficiency is still very strong. In fact, the average American farmworker out-produces his nearest foreign competitor almost 10 to 1 in pounds of food produced per man day. But that is the only case that can still be made.

OPEC has shown us all just how non-self-sufficient we are in energy. I'm not going to spend too much time today on the fuel category of minerals, but I'd like to table just a few facts on energy for you to consider along with my discussion about nonfuel minerals.

FACT 1

In the United States, we have about 5,000 quads of energy in proven reserves. A quad is a quadrillion British thermal units or BTU's; 4,577 or 92 percent of those

reserve quads are in coal and we produce about 18 quads of coal energy per year; 201 of those reserve quads are in natural gas and we produce about 20 quads of gas energy per year; 157 of those reserve quads are in oil, and we produce about 18 quads of oil energy per year.

FACT 2

In 1980, Americans consumed more than one-fourth of the world's total production of oil. We used over 5½ billion barrels, of which we imported 2.6 billion barrels. 2.6 million oil wells have been sunk in the United States—four times as many as the rest of the world. A half million are still operating. Saudi Arabia has less than 800 wells operating.

At our current production rate, currently known domestic reserves will be depleted in less than 9 years. For each Prudhoe Bay sized field that we discover, we can add 3 years to that.

If we can discover all of the potential reserves which are conventionally recoverable by primary, secondary, and tertiary methods of recovery, we will have enough for about 25 more years.

FACT 3

In 1980 we consumed 20 trillion cubic feet of natural gas versus proven reserves of 195 trillion cubic feet. In 1979, production exceeded discoveries by 39 percent. There is a potential reserve of 1,019 TCF of conventionally extractable natural gas in the United States. (If it can be found), and another 5,000 TCF potential reserve of unconventionally extractable gas contained in so-called tight sands, Devonian shale, coal seams, and geopressurized zones.

Considering proved reserves only, we would run out of domestic natural gas in less than 10 years.

If we can discover and extract all the conventionally recoverable potential reserves, we have enough for about 50 years.

If we can discover and can learn how to extract all of the nonconventionally extractable reserves, we will have enough for two centuries.

FACT 4

In 1980 we consumed 680 million tons of coal and exported another 100 million tons. Our proven coal reserves are almost 800 billion tons—enough, at our current production rate, for several centuries if it could all be extracted. But over half of this large reserve is in dirty, high sulfur bituminous.

We currently have a quarter million miners working in 6,000 mines in 26 States, and over 3,600 of these mines are surface strip mines. And most of our reserves are extractable only by strip mining which is currently not in style with certain groups, nor with certain elements in Government.

FACT 5

In 1980 we extracted 20 million tons of uranium ore from 300 mines—mainly in New Mexico and Wyoming. Almost a quarter of the world's uranium ore is located in those two States. In terms of usable energy, 1 pound of enriched uranium equals 3 million pounds of coal, and one $7 pellet of enriched uranium equals $100 worth of oil (over 3 barrels) or over 1 ton of coal.

About 1 percent of the potential energy can be extracted from uranium fuel using our current light water reactor. The advanced converter reactor can extract 3 percent; but the breeder reactor can extract 70 percent; breeders produce more fuel (plutonium) than they use. Again, not in style in certain quarters.

FACT 6

There are 32 million quads of geothermal energy within 10 KM of the Earth's surface. Each time you fly in an airliner, you probably fly higher than 10 KM. Most of this can't be tapped, but some can. In the Imperial Valley, a geothermal plant will come on line in 1983 and start producing 200 megawatts of electricty. Within 50 years, using known technology, geothermal source could supply 20 quads of energy per year—about one-third of our current energy production.

But it will be a very, very expensive undertaking with much financial risk.,

FACT 7

We have up to a trillion barrels of recoverable oil in oil shale deposits in this country. That's 40 times our proven conventional oil reserve. There is more oil contained just in our tar sands and heavy oil deposits than in all of our known conventional oil reserves. But both can only be tapped at some expense to the environment.

FACT 8

There are many other sources of energy within our borders, and within our grasp:

Biomass

Remember that highly productive American farmworker and remember the tons of refuse each of us generates each year.

Solar

Every day, the Sun sheds 500 times more energy on us than we consume. If we could tap only a small fraction of that over just 1 percent of the surface of our country, we would have all the energy we could use.

Wind

A form of solar energy.

The oceans

A powerful energy resource if it can be tapped.

And, obviously, hydroelectricity

Well, what's the object of that recitation on energy? There is an object, a very direct object. Each and every 1 of the 12 national energy resources I named has a problem—a national problem.

I don't need to recount those problems, I inferred them as I spoke. They're related to law: to Government regulation; to policy; to Government budget; to capital-cost recovery potential; to the environment; to the state of our national R. & D. activity; and to the state of our national productivity. They're national problems and they deserve your close attention and study.

What our generation does or does not do about these energy problems will directly affect all of us; will drastically affect our children; and will much more drastically affect our grandchildren.

Well, I want to shift gears a bit now to my principal topic—nonfuel minerals.

When we look at our nonfuel minerals position today, that old self-sufficiency myth I talked about earlier is completely destroyed. In terms of many essential nonfuel minerals, the United States is a "have-not" nation.

Now that's a neat, will-rounded phrase—"a have-not nation". It can conjure up all sort of specters in one's mind, which is of course, the end objective of the phrase.

I didn't invent it, although I use it a lot. Jim Santini didn't invent it, although he also uses it a lot.

In fact, with the possible exceptions of "productivity decline", and "quality circles", "have-not nation" is absolutely the most in phrase currently on the Washington cocktail circuit. It's guaranteed to get you a minimum of 2 minutes attention from at least one very intense young lady, wearing sincere low-heel shoes and sipping creme de cassis.

As testimonial to the fact that neither Slay nor Santini invented the phrase, I offer my second quote of the day:

"All calculations about America's present position and prospective strength must reckon with the new reality that we are, to a significant extent, a 'have not' power. More of the ingredients of American production than we are accustomed to realize originate outside America. We must scour the entire free world for metals and chemicals."

"Today our growing 'have not' status obliges us to calculate what we can do in terms of materials availability needed to support strategy and productivity alike. All questions of high policy, consequently, now turn on our ability to balance the equations of supply and demand governing the flow of metals and chemicals into our productive apparatus; and, in turn, the balancing of these metal equations, many of them subdividing into endless interrelated equations, has emerged as a supreme policy consideration."

And this author goes on to say:

"American security, in the last analysis, rests on American productivity. The present imbalance of our metallic equations is the weakest link in the system of American Security."

That was Eliot Janeway writing in the November–December 1951 issue of the Harvard Business Review. So if you want to blame somebody for that phrase, blame Eliot.

And, by the way, I could also have used Eliot's 1951 script today without too much change.

But trite as the phrase is, it's with us to stay simply because it's true.

Consider, if you will, the strategic implication of the following dirty dozen facts:

FACT 1

We had to import over 25 billion dollars worth of nonfuel minerals last year.

FACT 2

Today the United States is more than 50 percent dependent on foreign sources for 23 of the 40 essential nonfuel minerals we use in the United States; and almost totally import dependent for 12 of the most critical of these; and many of these essential minerals come exclusively from very unstable areas of the world.

FACT 3

The Soviet Union is totally dependent of foreign sources for all but 5 of these 40 essential minerals, and in none of those 5 are they over 50 percent dependent.

FACT 4

Much of the world's production and reserves of a number of our most critical materials are located in two areas of the world: Siberia and Southern Africa. These two areas contain 99 percent of the world's reserves of platinum group metals; 80 percent of the world's manganese ore; 97 percent of the world's vanadium; 96 percent of the world's chrome; 87 percent of the world's diamonds; 60 percent of the world's vermiculite; and 50 percent of the world's fluorspar, iron ore, asbestos, and uranium. Zaire and Zambia alone have 52 percent of the world's supply of cobalt and currently provide 65 percent ot the world's needs and 90 percent of our needs.

FACT 5

OPEC controls only 52 percent of the world's oil supply and the power of that cartel needs no commentary. It is awesome. Third world nonfuel mineral cartels, based on the OPEC example, are brewing. We have already heard strident calls for a "new international economic order" and for the right to nationalize, expropriate, or transfer ownership of foreign property." In many countries "foreign property" means mines and mineral deposits.

FACT 6

Our national stockpile is grossly deficient in many of these essential minerals—in fact we are below established goals in 37 critical materials; this shortage amounts to $11 billion or 61 percent of the desired inventory of $18 billion. And, no purchases have been made to add to the stockpile in over 20 years. $100 million was appropriated in the last session of Congress and will be spent this year for cobalt. At the rate of $100 million a year, our stockpile will be filled in just over a century—100 years—if we have no more inflation.

FACT 7

The United States could substantially reduce its d ependence on foreign sources for raw material through expansion of domestic sources for cobalt, bauxite, chromium, platinum, zinc, fluorspar, gold, nickel, t itanium, and many others. And every pound of productive capacity reduces the stockpile requirement by 3 pounds.

FACT 8

It takes up to 10 years to develop and bring a mineral deposit into production without any Federal constraints, but we do have many Federal constraints to mining. Eighty different Federal laws administered by 20 different Federal agencies constrain mineral exploration and mining operations in the United States.

FACT 9

As a result of these laws, over 75 percent of the public land in the United States has either been withdrawn or severely restricted from mining and mineral exploration—most of it in the last few years. This equates to an area the size of the entire United States east of the Mississippi River.

And most of that withdrawn land is in the most heavily mineralized areas of the country.

FACT 10

Even when we have adequate supplies of basic materials from friendly sources, we often don't have enough processing capacity. Titanium is a good exampls of that problem. We have only three companies in the United States which procese titanium ore and, at maximum capacity, they still fall 20 percent short of domestic titanium ore and, at maximum capacity, they still fall 20 percent short of domestic demand.

FACT 11

Moving up to the next industrial echelon, we find another capacity problem. There are, for instance, only three remaining U.S. suppliers of large forgings—the kind we need for aircraft landing gear and engine components. Literally hundreds of foundries were closed in the mid-1970's as a result of very ambitious OSHA/EPA rulemaking, Those which were able to stay alive had to make substantial investments in antipollution equipment which generally did nothing to improve their productivity, 51 have closed just in the last 2 years.

FACT 12

This shrinking industrial base, coupled with increasing demand, not only nationally, but worldwide, for scarce material, and products made from these materials, has resulted in greatly lengthened lead times—as much as 200 percent—and greatly escalated costs—as much as 300 percent price rise in just the last 2 years. Back in 1939, Congress recognized the grave danger of constrained mineral resources when it passed the Strategic Materials Act and again after WW II with the passage of the Strategic and Critical Materials Stockpile Act of 1946, to create a strategic and critical materials stockpile for use in time of war. The stockpile was originally planned to be used for defense-related purposes only; but there have been many shifts in objectives—some of them severe—which have nothing to do with defense. There have been sales from the stockpile to balance the budget, to control commodity prices, and to reduce inflation. This has severely hurt the system. Today, the stockpile is characterized by gross imbalances, gross deficits, and gross overages.

The stockpile is, in fact, in a shambles.

The dollar value of the stockpile in 1980 dollars, if all the goals were met, would be $18 billion. The current stockpile value is $13 billion but over $6 billion of this is material that is excess to stockpile goals and excess to our needs. Therefore, we have a net stockpile deficit of $11 billion.

Of the 62 family groups and individual materials that are contained in the stockpile, 60 percent do not meet established goals and some of the shortest in supply are the most critical to defense needs. For instance, the stockpile inventory of usable titanium sponge stands at only 11 percent of the goal, (there is an additional 6 percent of unusable sponge); tantalum—33 percent; cobalt—48 percent; columbium—52 percent.

As I said earlier, between 1960 and 1980 not a single dollar had been appropriated for additions to the stockpile, The $100 million appropriated in the 1981 budget broke that string, but at that rate, the $11 billion deficit would not be eliminated until the year 2090, assuming zero inflation.

Also exacerbating the situation, the revolving stockpile fund, which receives the dollars from sales from the stockpile, has been used only infrequently for the purpose intended. Instead money has often been transferred from the revolving fund to the Treasury for other uses unrelated to stockpile or defense needs. Since 1960 the revolving fund has been used only to purchase relatively minor amounts of jewel bearings, diamond dies, and asbestos.

Stockpile goals are generally established based on a projected 3-year demand. Considering the fact that we imported $29 billion worth of raw and processed nonfuel minerals last year, one could conclude that our stockpile goal should be at least three times that amount.

For the third and last segment of this somewhat meandering treatise, I'll be rather pedantic and lay out a case study on just five strategic materials to illustrate our vulnerability.

First—Cobalt:

POINT 1

Cobalt is absolutely critical to defense production. We are currently 100 percent dependent on foreign sources for all our needs of primary cobalt. You can't make a modern jet engine without it. An average of about 1,000 pounds of it is used in each jet engine made; it's also used in catalysts and paints; it's used to sinter tungsten carbides which are used for metal forming dies, mining tools, oil well drilling bits, machine tools of all kinds, et cetera, et cetera. Our total cobalt consumption has averaged just under 10,000 short tons annually for the last several years.

POINT 2

Currently Zaire and Zambia alone provide over 60 percent of our cobalt needs and in the aggregate, we import over 75 percent from countries in southern Africa. We are nearly 100 percent import dependent for cobalt.

POINT 3

The stockpile contains only 48 percent of the cobalt needed to meet the current goal, which is probably at least 50 percent too low.

POINT 4

The identified cobalt resources of the United States exceed 700,000 tons and are mainly located in the Midwest and Far West. Domestic mine production ceased at the end of 1979.

Second—Titanium:

POINT 1

There is currently no substitute for titanium in many critical military applications. For instance, today you can't build a modern jet engine without titanium; et cetera, et cetera, et cetera.

POINT 2

At the present time, there are three domestic producers of titanium sponge, whose combined capacity is about 52 million pounds of sponge per year. Their informal plans call for an expansion to a capacity of approximately 60 million pounds per year by the start of calendar year 1983. Current domestic demand for titanium sponge is about 50 million pounds per year, or some 15 percent in excess of domestic supply, as it has been for the past several years. Last year (1980) we imported 4,500 short tons of titanium sponge, up 80 percent over 1979 and up over 200 percent from 1978. 1982 demand is currently projected—conservatively—to be about 68 million pounds, which if current industry expansion projections hold, will result in an excess of demand over domestic supply of approximately 13 percent—a slight improvement over our situation today.

POINT 3

In fiscal year 1983, the demand for titanium sponge will skyrocket to almost 80 million pounds and in fiscal year 1984, to 85 million pounds considering only four known and reasonably firm Air Force programs—CX, MX, new bomber, and KC—135 re-engine—added to current demand. If the total potential new demands of the other services as well as the Air Force are considered, it is not unreasonable to project a sponge demand well in excess of 100 million pounds per year by 1985.

POINT 4

The national stockpile is woefully short of titanium sponge. Against a goal of 195,000 short tons, the stockpile contains only 21,465 short tons of usable sponge for 89-percent deficit of 173,535 short tons.

POINT 5

The United States produces very little rutile—the basic ore for titanium. Currently, we import the bulk of our rutile from Australia—A reliable and friendly source—but a source which depends on many thousands of miles of sea transport which could be effectively cut off in some future conflict. As a benchmark, in 1942, one out of four ships carrying bauxite from British Guiana and Surinam were sunk by German U-boats—right in our own backyard—and none of the bauxite ore ships which started the war, surived the war.

POINT 6

Since 1976, U.S. consumption of titanium metal has doubled. In addition to facing a severe shortage of sponge and legthened lead times for sponge, we also face a potentially critical shortage of titanium ingot, billet, plate, rod and bar, sheet strip, and tube.

POINT 7

Of all processed metals, titanium is the most expensive in terms of energy used per pound of product. It takes 185 times 10^3 BTU's to produce a pound of titanium metal as compared to 108 times 10^3 BTU's to produce a pound of aluminum, the next highest energy consumer. Although 80 percent of this energy is used in converting the raw rutile into sponge, it takes 37 times 10^3 BTU's per pound to turn the sponge into ingot—about the same amount of energy it takes to make steel.

Third–manganese:

POINT 1

The United States is 98 percent import dependent for its manganese and ferromanganese. It would be 100 percent dependent except for recycling. There are no known economically recoverable deposits of manganese in the United States. Over half of the 1,500,000 short tons of manganese and ferromanganese imported last year came from southern Africa with Gabon alone furnishing 44 percent. South Africa (not southern Africa) combined with the Soviet Union accounts for almost 90 percent of the world's known reserves.

POINT 2

The stockpile contains 89 percent of the established goal for metallurgical manganese ore and is some 37 percent over in high carbon ferromanganese and about 60 percent over in battery and chemical grade ore.

POINT 3

Most of the manganese used is converted to ferromanganese, the chief form in which the manganese is used in the production of steel for which it is essential.

POINT 4

There are very extensive deposits of manganese oxide over large areas of ocean floors, particularly in the Pacific Ocean between the Tropics of Cancer and Capricorn. There are also vast deposits of nodules on the ocean floor which contain about 24 percent manganese, 1.25 percent nickel, 1.0 percent copper, and .25 percent cobalt. Estimates vary as to the capital required to start a mining operation to tap the resources all the way from $1.5 billion by an element of the Federal Government to $20.0 billion by a large industrial firm which has studied the problem for many years.

Fourth—Chromium:

POINT 1

There is currently no adequate substitute for chromium. It is used for stainless steel; in jet engines; in aircraft; in guns; in tanks; in tools; in fact it, along with steel, is the ubiquitous strategic metal. The United States is 91 percent dependent

on foreign sources for its chromium needs. The remaining 9 percent is obtained through recycling of stainless steep scrap. We import 40 percent of our chromite ore from South Africa and 16 percent from the Soviet Union. The United States has produced no chromite in the past 4 years.

POINT 2

There are about 36 billion tons of chromite in the world which is enough to last for centuries; but 99 percent of that amount is in the Repbulic of South Africa (25 billion tons) and Zimbabwe (over 11 billion tons).

POINT 3

The stockpile currently contains just under 55 percent of the established goal of 4,725,000 short tons of chromite ore. An additional 530,000 tons of non-stockpile grade chromite ore is stockpiled but does not count against the goal.

Fifth—Bauxite, Alumina, and Primary Aluminum:

POINT 1

In this country, we use from 5 to 6 million short tons of aluminum metal every year and that figure is projected to be close to 10 million tons by 1990. Most of the primary aluminum metal made in this country is made from bauxite imported from Jamaica (42 percent), Guinea (32 percent), and Surinam (11 percent). All three countries have been or are now greatly influenced by the U.S.S.R. and Cuba.

POINT 2

Eleven of the major bauxite exporting countries are members of the "International Bauxite Association" which was established like OPEC, to control prices and, if necessary, supply as well.

POINT 3

The United States imports 250,000 tons of refractory grade bauxite each year. Of a stockpile goal of 1,422,000 short tons, only 177,000 tons are contained in the stockpile. Currently, there is only one source in the western world for refractory bauxite—Guyana—a Marxist state who recently nationalized the industry. Refractory bauxite is the rarest and purest of all bauxite ores in natural state.

POINT 4

Aluminous refractories could be manufactured from alumina extracted from kaolin clays of the Southeast United States, and, perhaps anorthosite from the Rockies, but no major R. & D. effort has been mounted to develop a production process for beneficiating the alumina bearing ores.

There are many other specific examples of critical problems in our raw and processed minerals industry which I could discuss, but I believe those examples will serve to illustrate my major thesis: These problems are national in scope, and, we must have a national commitment toward national solutions.

We need aggressive implementation of a sound national nonfuels mineral policy. The goals set forth in the Mining and Minerals Policy Act of 1970 and expanded by the National Materials and Minerals Policy Act of 1980 are adequate, but little has been done to try to attain these goals.

Congressional oversight should be exercised to insure that the Nation's mineral needs and resources are adequately considered in all actions and decisions of Federal agencies and departments.

We need a commitment to rejuvenate the national stockpile and to support adequate stockpile goals; we need a long term commitment to expand productive capacity; and, we need tax reform to incentivize capital investment in new industrial plant and equipment.

The Congress should increase domestic supply of critical materials whenever possible, through incentives such as use of the Defense Production Act of 1950, as amended. Title III of that act should be changed to facilitate such use.

We need many voices raised to keep these problems visible and on the public conscience.

What we don't need are soothsayers—pollyannas—who claim that everything will turn out all right if we just sit and wait. Things won't turn out all right unless we make things turn out all right.

I started with a quote and I'll close with a quote:

In 1973, in Prague, Leonid Brezhnev made the following comment to Siad Barre, President of Somalia, and I quote: "Our aim is to gain control of the two great treasure houses on which the West depends. The energy treasure house of the Persian Gulf, and the mineral treasure house of central and southern Africa."

What a clear and concise statement of a national energy and minerals policy and what a clear and concise implementation of that policy we have seen since the policy was stated.

Senator HUMPHREY. Gentlemen, thank you very much for your help this morning. We are looking forward to working with you and looking forward to making some really marked improvements in the next few years in this area.

Thank you.

[Questions submitted for the hearing record follow:]

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY

Senator HUMPHREY. Can you provide for the record the calculations used, together with underlying assumptions, to arrive at stockpile goals for silver, cobalt, titanium and chrome?

Answer. Classified tables indicating the impact of the various assumptions on cobalt, silver, titanium and chromium have been provided to the Committee.

STOCKPILE ASSUMPTIONS

3-year planning period

The assumptions currently used to establish stockpile goals are based upon conservative estimates for materials needed to support U.S. defense requirements during a major conventional war over a three year period. Included in these defense requirements are the newest weapons systems including operation and maintenance.

Prewar industrial mobilization

Stockpile policy guidance includes an assumption that a one-year period exists prior to the commencement of the assumed conflict This year allows sufficient time to mobilize the military and defense supporting industry to a wartime footing. Because of this mobilization period, wartime material requirements and thus stockpile goals, are larger than what would be in the absence of mobilization.

It is postulated, however, that export controls of strategic supplies, priority and allocation measures, substitution, austerity, and conservation steps will be initiated It is expected that these controls will ration supplies and suppress and/or redirect nonessential demand.

Economic assumptions

The following assumptions are used to modify the picture of a wartime economy:

(1) Personal consumption expenditures (PCE) are reallocated from durable goods towards nondurable goods, savings, and services.

(2) Investment demand is shifted from private residential housing and commercial structures into the manufacturing sector to build machinery and other equipment.

(3) The effective size of the labor force increases to reflect wartime full employment labor demand pressures.

(4) The level and composition of aggregate exports and imports are structured to conform to emergency conditions. There are U.S. balance of payments deficits throughout the conflict which reflects absorption of foreign resources to further war production.

(5) Corporate and personal tax rates will rise during the war years.

(6) Pollution controls are relaxed to reach maximum expansion potential of the industrial base.

(7) Accelerated depreciation schedules are used.

Supply assumptions

Once estimates of foreign supplies of strategic and critical materials utilizing expanded possibilities are developed, a factoring process is applied to reflect assumption about accessibility and survivability of these supplies in wartime. War zone countries are initially eliminated as supply sources. Available materials

are further reduced by a factoring system utilizing country ratings prepared by the State Department. The following factors are included in the ratings:

(1) Political orientation toward the U.S.
(2) Ability to sustain stockpile material exports in wartime.
(3) Dependability of the labor force in wartime.
(4) Vulnerability to sabotage.

The available supply after applying a hedge for political reliability is further reduced by transportation losses incurred through enemy interdiction.

STOCKPILE CALCULATIONS: A SUMMARY

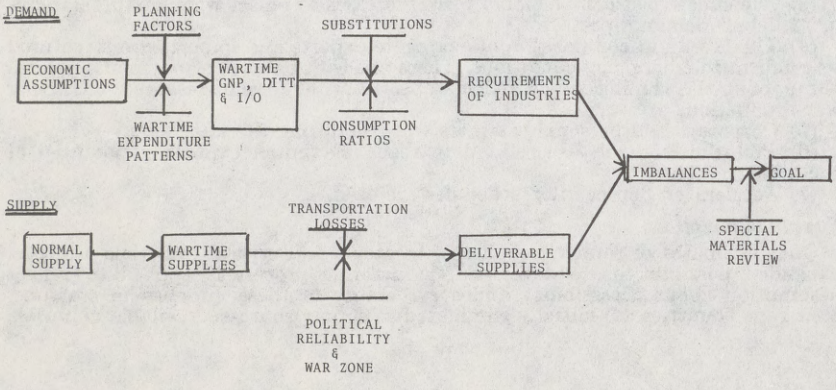
Stockpile goals represent the difference between estimated available supply and estimated requirements during a major war, three years in duration. The requirements estimating procedure begins with projections of GNP, using the Chase Econometric Model. The expenditure patterns of the Department of Defense are incorporated into the model and adjustments are made to personal consumption, investment, imports and exports to reflect wartime conditions. Estimates of wartime GNP are then developed separately for Defense, Essential Civilian and Basic Industrial "tiers" of the economy. The three tier wartime GNP expenditure are then translated into industrial output (dollars).

To translate wartime industrial output levels (dollars) into material requirements (physical units) a conversion factor is needed. To generate this conversion factor, first, material experts estimate the consumption of each material by industry for the most recent 12 to 20 years. The consumption of each material by each industry in a given year is divided by the gross output of that industry for that same year. The resulting figure is called a material consumption ratio (MCR). This ratio represents the amount of a specific material needed by a specific industry to produce one dollar of finished product. Using the MCR for each material-industry combination, a projection is made to cover the time period encompassed by the emergency.

Since all projections are subject to error, at this point planning factors are introduced. The planning factors or adjustment to the MCR's reflect the willingness to accept risk of shortfalls for the three tiers—Defense (DOD), Essential Civilian (EC), and Basic Industrial (BI)—in stockpile planning. The MCR for DOD is, therefore, higher than the EC, and the EC is higher than the BI for each material. The MCR's are then multiplied by the total gross output expenditures explained above to estimate material requirements.

The supply estimates of a material are based on current domestic production and capacity and expected imports. Sources of supply are rated according to factors influencing the availability of supply under emergency conditions. Country location, for example, is one of the factors used in the source of supply ratings. Thus, the supply or a portion of the supply that is included in the "net" or "available supply" again reflects the acceptable risk of shortfall for the three tiers (DOD, EC and BI) used in stockpile planning.

Once net material requirements and supplies are established for the three tiers, estimates of imbalances (i.e., shortfalls of requirements versus supplies) can be estimated. The imbalances are then reviewed by commodity and industry specialists. After review and necessary adjustments have been made, the adjusted imbalances become stockpile goals upon approval of the Director, FEMA and review by Congress.



Senator HUMPHREY. The House Armed Services Committee has proposed several changes to the Stock Piling Act. Would you briefly describe these changes and give us your position on them?

Answer. The House Armed Services Committee recommended changes to the Stock Piling Act as follows:

(1) Provide that the President submit each year a five-year plan for the operation of the National Defense Stockpile. The Administration now submits an Annual Materials Plan for the stockpile. There is no objection to a statutory requirement that each plan cover a five-year interval provided that materials listed not be revealed to the general public. It would also be necessary to provide for revisions to account for changes in market conditions.

(2) Provide that no acquisitions could be made without informing appropriate committees of the Congress. The Administration has no objection to this additional mandated Congressional oversight provided that the proposed acquisition materials not be revealed to the general public prior to issuance of invitations to bid.

(3) Eliminate the provision in the current law that limits the availability of appropriated funds for the purchasing of stockpile materials to five years. The Administration opposes this change which would repeal provisions of the Stock Piling Act because these funds should revert to the Treasury if not used within a reasonable period.

(4) Eliminate the provision in current law that provides that funds remaining in the Stockpile Transaction Fund for three fiscal years would revert to miscellaneous receipts of the Treasury. The Administration opposes this change which would repeal provisions of the Stock Piling Act because these funds should revert to the Treasury if not used within a reasonable period.

(5) Provide that no sales could be made from the National Defense Stockpile if the sale would result in a balance in the Stockpile Transaction Fund in excess of $1 billion or, in the case of a disposal to be made after September 30, 1983, if the disposal would result in a balance in the fund in excess of $500 million.

FEMA opposes these limitations because they would limit our flexibility to manage the stockpile fund. For example, if the cap were approached, sales might have to be stopped and a disruption of the marketing program might ensue. In addition, the cap may lead to needless paperwork to monitor the available funds more closely.

Senator HUMPHREY. I assume you have seen Senator McClure's bill, S. 1338. Briefly explain to the Subcommittee what this bill would do.

Answer. The primary purpose of S. 1338 is to prescribe the method for determining the quantity of any material to be stockpiled under the Strategic and Critical Materials Stock Piling Act. Under S. 1338 the degree of peacetime import dependency would be the primary basis for assigning the stockpile materials to one of three classes: A, B or C. The stockpile goals then would be based on three years worth of net imports for those materials assigned to class A; two years of net imports for class B materials; and one year of net imports for class C materials. The actual "year" figures would be the average of a five-year base period preceding the calculations which are to be made at least once every four years.

Senator HUMPHREY. What is the Administration's position on the McClure bill and why?

Answer. The Administration does not favor the McClure bill because it would base stockpile goals on commercial import trends rather than national security requirements. Although there is provision for exception to this approach in the bill, the Administration believes that exceptions will be more numerous than the rule when emergency needs are considered. Among the many factors omitted are: shifts to a more materials-intensive industrial base; recognition that some foreign sources of supply are accessible in wartime, and for those that are, higher-than-peacetime rates of supply can be expected; changes in civilian consumption patterns away from durables and into nondurables and services; substitution possibilities; and expanded production of materials that would result, in some cases, from increased demand. In short, peacetime patterns do not reflect wartime demand or supply conditions. If the McClure method were used the present stockpile levels would be based on a recession economy of the late 1970's.

The other provisions of the McClure bill—interagency committee and changes in goals only when movement is in excess of ten percent—are already a part of the goal calculation process and thus unnecessary additions to the law.

Senator HUMPHREY. The McClure bill would result in very stable stockpile goals—they would be reviewed only every four years and could be changed only

if new figures showed a goal change of greater than 10% were warranted. Is this stability desirable?

Answer. Our analysis of the stockpile goals generated by the McClure bill proposal indicates that they would not be very stable, but would instead change more often than would goals calculated using current methodology. The reason for this is the highly cyclical nature of imports for many stockpiled materials. Review only every four years would not appear to correct the instability of McClure goals, but would result in a four-year lag in taking into account changes in industry uses.

In 1977 in testimony on a similar proposal (S. 1810) to calculate stockpile goals, a statistical analysis was submitted of the changes resulting from both methods of goal calculations. The results indicated that goals calculated using the McClure method were not markedly more stable than past or present goals. (Refer, Hearing Report, Subcommittee on Military Construction and Stockpiles, Committee on Armed Services, September 9, 1977, pages 32, 33.)

Senator HUMPHREY. Have you calculated the impact of the McClure bill on current stockpile goals and inventories?

Answer. Yes, the McClure bill would increase the value of the stockpile goals to $23.9 billion from the $20.7 billion level established by FEMA. Approximately $14.9 billion in acquisitions would be needed to fulfill the McClure goals compared to $12.6 billion to fulfill the goals established by FEMA.

Detailed tables are provided for the record. The first table shows the level of the McClure goals and the dollar value of excesses and the shortages under the McClure bill. The second table illustrates the impact of the McClure goals on the present inventory. Under the McClure goals the present inventory would contain approximately $3.1 billion in surplus material. Using the FEMA method the surplus inventory amounts to approximately $7 billion.

NATIONAL DEFENSE STOCKPILE POLICY DIVISION—COMPARISON OF FEMA STOCKPILE GOALS AND GOALS CALCULATED USING FORMULA FROM S. 1338 (McCLURE BILL) (GOA.)

	FEMA goal in units	S. 1338 goal in units	Difference in units	FEMA goal (millions)	S. 1388 goal (millions)	Difference (millions)
	(1)	(2)	(1)−(2)	(3)	(4)	(3)−4
Alumina (short tons)	0	7,755,000	−7,755,000	0	$1,159	−$1,159
Aluminum (short tons)	700,000	290,000	410,000	$1,064	441	623
Bauxite, metal grade:						
Jamaica (long dry tons)	21,000,000	25,938,000	−4,938,000	792	978	−186
Surinam (long dry tons)	6,100,000	7,749,000	−1,649,000	247	314	−67
Aluminum oxide:						
Abrasive grain (short tons)	0	0	0	0	0	0
Fused crude (short tons)	770,000	447,641	322,359	200	116	84
Bauxite, abrasive grade (long calcined tons)	0	0	0	0	0	0
Antimony (short tons)	36,000	36,394	−394	144	146	−2
Asbestos:						
Amosite (short tons)	17,000	7,238	9,762	9	4	5
Chrysoltile (short tons)	3,000	44,723	−41,723	4	67	−63
Bauxite, refractory (long calcined tons)	1,400,000	843,371	556,629	350	211	139
Beryl ore (11 percent Beo) (short tons)	18,000	5,351	12,649	23	7	16
Beryllium:						
Copper master alloy (short tons)	7,900	3,442	4,458	80	35	45
Metal (short tons)	400	31	369	138	11	128
Bismuth (pounds)	2,200,000	5,808,600	−3,608,600	5	15	−9
Cadmium (pounds)	11,700,000	12,104,000	−404,000	23	24	−1
Castor oil, sebacic acic (pounds)	22,000,000	298,806,000	−276,806,000	10	140	−130
Chromite:						
Chemical, (short dry tons)	675,000	731,301	−56,301	40	43	−3
Metallurgical (short dry tons)	3,200,000	2,438,400	761,600	410	312	−97
Chromium:						
Ferro:						
High carbon (short tons)	185,000	650,454	−465,454	128	451	−323
Low carbon (short tons)	75,000	118,460	−43,460	98	155	57
Silicon (short tons)	90,000	14,656	75,344	67	11	56
Metal (short tons)	20,000	5,481	14,519	170	47	123
Chromite, refractory grade ore (short dry tons)	850,000	837,860	12,140	80	79	1
Cobalt (pounds)	85,400,000	51,672,000	33,728,000	2,135	1,292	843
Columbium:						
Carbide powder (pounds)	100,000	0	100,000	3	0	3
Concentrates (pounds)	5,600,000	6,999,000	−1,399,000	80	100	−20
Ferro (pounds)	0	9,879,000	−9,879,000	0	62	−62
Metal (pounds)	0	126,000	−126,000	0	5	−5
Copper (short tons)	1,000,000	188,656	811,344	1,972	372	1,600

	FEMA goal in units (1)	S. 1338 goal in units (2)	Difference in units (1)−(2)	FEMA goal (millions) (3)	S. 1388 goal (millions) (4)	Difference (millions) (3)−4
Cordage fibers:						
Abaca (pounds)	155, 000, 000	209, 300, 000	−54, 300, 000	81	109	−28
Sisal (pounds)	60, 000, 000	560, 700, 000	−500, 700, 000	24	224	−200
Diamond:						
Dies, small (PC)	60, 000	1, 778	58, 222	3	0	3
Industrial, brt. (carats)	22, 000, 000	0	22, 000, 000	56	0	56
Industrial stones (carats)	7, 7[illegible]0, 000	11, 321, 020	−3, 621, 020	172		−81
Feathers and down (pounds)	1, 500, 000	40, 533, 000	−39, 033, 000	22	252	−568
Fluorspar:						
Acid grade (short dry tons)	1, 400, 000	2, 259, 000	−859, 000	196	316	−120
Metallurgical grade (short dry tons)	1, 700, 000	1, 113, 000	587, 000	166	109	57
Graphite, natural:						
Ceylon, amo lump (short tons)	6, 300	14, 097	−7, 797	6	13	−7
Malagasy crystallive (short tons)	20, 000	13, 128	6, 872	13	9	5
Others (short tons)	2, 800	1, 508	1, 292	1	0	0
Iodine (pounds)	5, 800, 000	19, 060, 800	−13, 260, 800	41	136	−95
Jewel bearings (PC)	120, 000, 000	117, 087, 000	2, 913, 000	116	114	3
Lead (short tons)	1, 100, 000	158, 688	941, 312	792	114	678
Manganese:						
Battery grade:						
Natural (short dry tons)	62, 000	73, 482	−11, 482	5	6	−1
Syn (short dry tons)	25, 000	10, 108	14, 892	25	10	15
Ore:						
Chemical grade (short dry tons)	170, 000	76, 896	93, 104	14	6	8
Metallurgical grade (short dry tons)	2, 700, 000	4, 748, 400	−2, 048, 400	197	347	−150
Ferro:						
High carbon (short tons)	439, 000	1, 623, 437	−1, 184, 437	200	739	−539
Low carbon (short tons)	0	0	0	0	0	0
Medium carbon (short tons)	0	92, 931	−92, 931	0	71	−71
Silicon (short tons)	0	160, 771	−160, 771	0	79	−79
Metal, electrolytic (short tons)	0	2, 508	−2, 508	0	4	−4
Mercury (flasks)	10, 500	73, 094	−62, 594	4	30	−26
Mica:						
Muscovite bl, st and bet (pounds)	6, 200, 000	2, 517, 230	3, 682, 770	34	14	20
Muscovite flm, 1st and 2d (pounds)	90, 000	41, 697	48, 303	1	0	1
Muscovite split (pounds)	12, 630, 000	14, 962, 272	−2, 332, 272	25	30	−5
Phlogopite blk (pounds)	210, 000	30, 600	179, 400	0	0	0
Phlogopite split (pounds)	930, 000	1, 179, 279	−249, 279	1	1	−0
Molybdenum:						
Disulphide (pounds)	0	0	0	0	0	0
Ferro (pounds)	0	0	0	0	0	0
Nickel (Ni+Co) (short tons)	200, 000	465, 000	−265, 000	1, 400	3, 255	−1, 855
Opium:						
gum—Ama (pounds)	0	0	0	0	0	0
salt—Ama (pounds)	130, 000	327, 819	−197, 819	75	190	−115
Platinum group metals:						
Iri (troy ounces)	98, 000	39, 876	58, 124	59	24	35
Pall (troy ounces)	3, 000, 000	2, 586, 000	414, 000	420	362	58
Plat (troy ounces)	1, 310, 000	2, 055, 000	−745, 000	622	976	−354
Pyrethrum (pounds)	500, 000	446, 679	53, 321	6	5	1
Quartz crystals (pounds)	600, 000	2, 931, 000	−2, 331, 000	4	18	−14
Quinidine (avoirdupois ounces)	10, 100, 000	13, 746, 600	−3, 646, 600	43	59	−16
Quinine (avoirdupois ounces)	4, 500, 000	5, 370, 000	−870, 000	14	17	−3
Rubber (long tons)	850, 000	2, 109, 006	−1, 259, 006	1, 228	3, 047	−1, 819
Rutile (short dry tons)	106, 000	723, 000	−617, 000	34	235	−201
Sapphire and ruby (carats)	0	63, 000, 000	−63, 000, 000	0	1	−1
Silicon carbide, crude (short tons)	29, 000	210, 296	−181, 296	13	95	−82
Silver (fine) (troy ounces)	0	102, 120, 000	−102, 120, 000	0	1, 353	−1, 353
Talc, steatite blk and Imp (short tons)	28	27	1	0	0	0
Tantalum:						
Carbide powder (pounds)	0	0	0	0	0	0
Metal (pounds)	0	98, 600	−98, 600	0	14	−14
Minerals (pounds)	8, 400, 000	3, 924, 000	4, 476, 000	974	455	519
Thorium nitrate (pounds)	600, 000	369, 315	230, 685	2	1	1
Tin (long tons)	42, 000	146, 157	−104, 157	609	2, 119	−1, 510
Titanium sponge (short tons)	195, 000	2, 415	192, 585	2, 816	35	2, 781
Tungsten: Carbide powder (pounds)	2, 000, 000	0	2, 000, 000	30	0	30
Ferro (pounds)	0	1, 728, 000	−1, 728, 000	0	21	−21
Metal power (pounds)	1, 600, 000	0	1, 600, 000	22	0	22
Ores and concentrates (pounds)	55, 450, 000	32, 856, 000	22, 594, 000	492	292	201
Vanadium:						
ferro (short tons)	1, 000	5, 279	−4, 279	14	74	−60
pentoxide (short tons)	7, 700	479	7, 221	84	5	79
Vegetable tannin:						
Ches (long tons)	5, 000	9, 441	−4, 441	3	5	−2
Queb (long tons)	28, 000	41, 607	−13, 607	17	25	−8
Wattle (long tons)	15, 000	29, 523	−14, 523	8	17	−8
Zinc (short tons)	1, 425, 000	1, 480, 000	−55, 000	1, 215	1, 262	−47
Total				20, 674	23, 879	−3, 205

NATIONAL DEFENSE STOCKPILE POLICY DIVISION—FEDERAL EMERGENCY MANAGEMENT AGENCY

	Comparison of inventory March 1981	Inventory to McClure goals	McClure goals difference, units	Inventory less McClure ($1,000)	McClure exceeds inventory ($1,000)	Inventory exceeds McClure ($1,000)	McClure class
Alumina (short tons)	0	7,755,000	−7,755,000	−1,158,597	−1,158,597	0	A
Aluminum (short tons)	1,733	290,000	−288,267	−438,139	−438,139	0	C
Bauxite, metal grade:							
Jamaica (long dry tons)	8,858,881	25,938,000	−17,079,119	−644,053	−644,053	0	A
Surinam (long tons)	5,299,596	7,749,000	−2,449,404	−99,177	−99,177	0	A
Aluminum oxide:							
Abrasive grain (short tons)	50,786	0	50,786	58,912	0	58,912	C
Fused crude (short tons)	249,867	447,641	−197,774	−51,421	−51,421	0	A
Bauxite, abrasive, grade (long calcined tons)	0	0	0	0	0	0	C
Antimony (short tons)	40,729	36,394	4,335	17,340	0	17,340	B
Asbestos:							
Amosite (short tons)	42,533	7,238	35,295	18,212	0	18,212	A
(Chrysotile (short tons)	8,793	44,723	−35,930	−53,895	−53,895	0	A
Bauxite, refractory (long calcined tons)	174,599	843,371	−668,772	−167,193	−167,193	0	A
Beryl ore (11 percent Beo) (short tons)	17,987	5,351	12,636	15,985	0	15,985	C
Beryllium:							
Copper master alloy (short tons)	7,387	3,442	3,945	39,844	0	39,844	C
Metal (short tons)	229	31	198	68,508	0	68,508	C
Bismuth (pounds)	2,081,298	5,808,600	−3,727,302	−9,318	−9,318	0	A
Cadmium (pounds)	6,328,809	12,104,000	−5,775,191	−11,551	−11,551	0	B
Castor oil, sebacic acid (pounds)	5,009,697	298,806,000	−293,796,304	−138,084	−138,084	0	A
Chromite:							
Chemical (short dry tons)	242,414	731,301	−488,887	−28,829	−28,829	0	A
Metallurgical (short dry tons)	1,956,824	2,438,400	−481,576	−61,642	−61,642	0	A
Chromium:							
Ferro:							
High carbon (short tons)	402,003	650,454	−248,451	−172,288	−172,288	0	A
Low carbon (short tons)	300,192	118,460	181,732	238,251	0	238,251	A
Silicon (short tons)	56,986	14,656	42,330	31,663	0	31,663	B
Metal (short tons)	3,763	5,481	−1,718	−14,603	−14,603	0	B
Chromite, refractory grade ore (short dry tons)	391,414	837,860	−446,446	−42,122	−42,122	0	A
Cobalt CO (pounds)	40,802,393	51,672,000	−10,869,607	−271,740	−271,740	0	A
Columbium:							
Carbide powder (pounds)	21,372	0	21,372	603	0	603	C
Concentrates (pounds)	911,239	6,999,000	−6,087,761	−87,117	−87,117	0	A
Ferro (pounds)	598,410	9,879,000	−9,280,590	−58,375	−58,375	0	A
Metal (pounds)	44,851	126,000	−81,149	−3,213	−3,213	0	B
Copper (short tons)	28,444	188,656	−160,212	−315,940	−315,940	0	C
Cordage fibers:							
Abaca (pounds)	0	209,300,000	−209,300,000	−108,836	−108,836	0	A
Sisal (pounds)	0	560,700,000	−560,700,000	−224,280	−224,280	0	A
Diamond:							
Dies, small (PC)	25,473	1,778	23,695	1,066	0	1,066	C
Industrial, cr. brt. (carats)	23,692,782	0	23,692,782	60,417	0	60,417	C
Industrial, stones (carats)	18,723,796	11,321,020	7,402,776	164,893	0	164,893	A
Feathers and down (pounds)	0	40,533,000	−40,533,000	−589,755	−589,755	0	A
Fluorspar:							
Acid grade (short dry tons)	895,350	2,259,000	−1,363,650	−190,911	−190,911	0	A
Metallurgical grade (short dry tons)	294,875	1,113,000	−818,125	−79,766	−79,766	0	A
Graphite, natural:							
Ceylon, amo lump (short tons)	5,442	14,097	−8,655	−8,205	−8,205	0	A
Malagasy crystalline (short tons)	17,906	13,128	4,778	3,177	0	3,177	A
Others (short tons)	1,933	1,508	425	77	0	77	B
Iodine (pounds)	8,009,811	19,060,800	−11,050,989	−78,794	−78,794	0	A
Jewel bearings (PC)	54,133,806	117,087,000	−62,953,194	−61,065	−61,065	0	A
Lead (short tons)	601,026	158,688	442,338	318,484	0	318,484	C
Manganese:							
Battery grade:							
Natural (short dry tons)	190,864	73,482	117,382	9,625	0	9,625	A
Syn (short dry tons)	3,011	10,108	−7,097	−7,097	−7,097	0	B
Ore:							
Chemical grade (short dry tons)	220,955	76,896	144,059	11,813	0	11,813	A
Metallurgical grade (short dry tons)	2,409,377	4,748,400	−2,339,023	−170,912	−170,912	0	A

NATIONAL DEFENSE STOCKPILE POLICY DIVISION—FEDERAL EMERGENCY MANAGEMENT AGENCY—Continued

	Comparison of inventory March 1981	Inventory to McClure goals	McClure goals difference, units	Inventory less McClure ($1,000)	McClure exceeds inventory ($1,000)	Inventory exceeds McClure ($1,000)	McClure class
Manganese—Continued							
Ferro:							
High carbon (short tons)	599,978	1,623,437	−1,023,459	−466,042	−466,042	0	A
Low carbon (short tons)	0	0	0	0	0	0	B
Medium carbon (short tons)	28,920	92,931	−64,011	−48,584	−48,584	0	B
Silicon (short tons)	23,574	160,771	−137,197	−67,225	−67,225	0	B
Metal, electrolytic (short tons)	14,172	2,508	11,664	16,330	0	16,330	C
Mercury (flasks)	191,391	73,094	118,297	49,093	0	49,093	B
Mica:							
Muscovite bl, st and bet (pounds)	5,005,704	2,517,230	2,488,474	13,459	0	13,459	A
Muscovite flm, and 2nd (pounds)	1,273,855	41,697	1,232,158	14,447	0	14,447	A
Muscovite splt (pounds)	19,035,162	14,962,272	4,072,890	8,146	0	8,146	A
Phlogopite blk (pounds)	16,718	30,600	−13,882	−30	−30	0	A
Phlogopite splt (pounds)	1,918,265	1,179,279	738,986	739	0	739	A
Molybdenum:							
Disulphide (pounds)	0	0	0	0	0	0	C
Ferro (pounds)	0	0	0	0	0	0	C
Nickel (Ni+Co) (short tons)	0	465,000	−465,000	−3,255,000	−3,255,000	0	A
Opium:							
Gum—Ama (pounds)	31,795	0	31,795	6,715	0	6,715	A
Salt—Ama (pounds)	39,508	327,819	−288,311	−166,909	−166,909	0	A
Platinum group metals:							
Iri (troy ounces)	16,991	39,876	−22,885	−13,732	−13,732	0	A
Pall (troy ounces)	1,252,788	2,586,000	−1,333,212	−186,649	−186,649	0	A
Plat (troy ounces)	439,597	2,055,000	−1,615,403	−767,314	−767,314	0	A
Pyrethrum (pounds)	0	440,679	−440,679	−5,398	−5,398	0	A
Quartz crystals (pounds)	2,420,838	2,931,000	−510,162	−3,061	−3,061	0	A
Quinidine (avoirdupois ounces)	1,798,762	13,746,600	−11,947,838	−51,378	−51,378	0	A
Quinne (ounces)	2,770,214	5,370,000	−2,599,786	−8,320	−8,320	0	A
Rubber (long tons)	119,208	2,109,006	−1,989,798	−2,874,865	−2,874,865	0	A
Rutile (short dry tons)	39,130	723,000	−683,870	−222,253	−222,253	0	A
Sapphire and ruby (carots)	16,305,502	63,000,000	−46,694,498	−513	−513	0	A
Silicon carbide, crude (short tons)	80,548	210,296	−129,748	−58,387	−58,387	0	B
Silver (fine) (troy ounces)	139,500,000	102,120,000	37,380,000	495,285	0	495,285	B
Talc, steatite blk and Imp (short tons)	1,092	27	1,065	394	0	394	B
Tantalum:							
Carbide powder (pounds)	28,688	0	28,688	4,970	0	4,970	C
Metal (pounds)	201,033	98,600	102,433	14,341	0	14,341	C
Minerals (pounds)	1,399,143	3,924,000	−2,524,857	−292,884	−292,884	0	A
Thorium nitrate (pounds)	7,141,812	369,315	6,772,497	18,624	0	18,624	A
Tin (long tons)	200,112	146,157	53,955	782,080	0	782,080	A
Titanium sponge (short tons)	21,465	2,415	19,050	275,082	0	275,082	C
Tungsten:							
Carbide powder (pounds)	1,921,167	0	1,921,167	28,549	0	28,549	C
Ferro (pounds)	840,752	1,728,000	−887,248	−10,558	−10,558	0	A
Metal powder (pounds)	1,566,964	0	1,566,964	21,781	0	21,781	C
Ores and concentrates (pounds)	57,113,166	32,856,000	24,257,166	215,404	0	215,404	A
Vanadium:							
Ferro (short tons)	0	5,279	−5,279	−74,434	−74,434	0	A
Pentoxide (short tons)	541	479	62	675	0	675	B
Vegetable tannin:							
Ches (long tons)	16,717	9,441	7,276	3,928	0	3,928	A
Queb (long tons)	142,691	41,607	101,084	59,619	0	59,619	A
Wattle (long tons)	16,397	29,523	−13,126	−7,350	−7,350	0	A
Zinc (short tons)	375,970	1,480,000	−1,104,030	−941,184	−941,184	0	B
Total				−11,780,457	−14,868,988	3,088,531	

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

Senator LEVIN. The Administration is proposing to spend more than $2 billion during the next several years to purchase materials for the Strategic Stockpile. This would be one of the largest purchase programs in this area since the stockpile was established after World War II. How can you assure us that this amount of money will be well-spent and not be directed toward purchasing unnecessary commodities?

Answer. As the stockpile announcement by the President on March 13, 1981 indicates, these purchases will cover critical areas of deficiency. The Administration believes that the current interagency process used in stockpile decision-making, together with Congressional oversight and the statutory safeguards in the Strategic and Critical Materials Stock Piling Act, will ensure that the money is well-spent in purchasing needed materials. The $2 billion proposed for acquisition authorization, when appropriated, would be used to acquire materials having goal deficits of the highest defense priorities.

To calculate these stockpile goals, we have followed statutory guidance in the Stock Piling Act revised in 1979 as well as a planning process selected by President Ford, reaffirmed by President Carter, and supported by President Reagan. This calculation procedure was developed during an extensive interagency study chaired by the Federal Emergency Management Agency under the direction of the National Security Council. The Departments of the Interior, Agriculture, Commerce, Treasury, State, and Defense, the General Services Administration and the Central Intelligence Agency have representatives on the stockpile Annual Materials Plan Steering Committee and take part in the review of stockpile goals. It is through this interagency process that decisions are made to acquire particular materials.

During its deliberations on the revision of the Stock Piling Act in 1979, the Armed Services Committees of both Houses of the Congress endorsed these goal calculation procedures. The Comptroller General of the United States in his report entitled "National Defense Requirements for a Silver Stockpile" (LCD–79–410) states:

"The methodology the Federal Preparedness Agency (now Federal Emergency Management Agency) used to determine stockpile goals is, in GAO's opinion, a reasonable approach representing a variation of the generally accepted state of the art for this type of economic analysis."

Senator LEVIN. How do you justify this large amount? How do you know that we need $2 billion worth of materials? Why shouldn't we establish a goal of $1 billion or $3 billion?

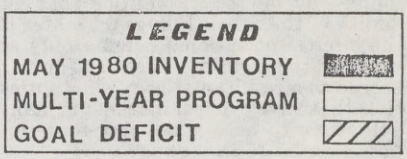
Answer. A comparison of wartime requirements and the stockpile inventory shows that substantial restructuring of the stockpile is necessary. The intent of the Administration is to reduce the most critical areas of deficiency at a rate commensurate with stockpile sales of excess materials. For this reason, the $2 billion purchase program represents anticipated sales receipts over a period of five years. Although conditions may change, every effort will be made to restructure the stockpile in a balanced and expeditious manner.

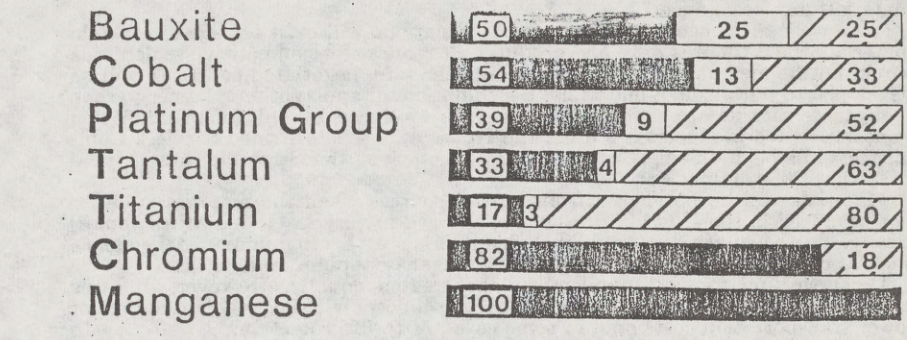
Senator LEVIN. Can you provide for the record a detailed list of commodities to be acquired showing the acquisition rate by fiscal years in dollars and quantities?

Answer. The Administration-sponsored bill, S. 906, if passed, would authorize future appropriations totaling $2 billion. Until the Congress approves this authority and then subsequently appropriates these moneys, it is not possible to provide any meaningful list of acquisitions by fiscal year. The following table, prepared by the General Services Administration, is a hypothetical example of what can be achieved in a stockpile acquisition program.

HYPOTHETICAL STOCKPILE ACQUISITION PROGRAM

(BASED ON H.R. 2912 ESTIMATED RECEIPTS)





NOTE: THIS TABLE IS PROVIDED AS AN EXAMPLE OF WHAT CAN BE ACHIEVED AND DOES NOT REPRESENT SPECIFIC ACQUISITION PLANS OR COMMITMENTS.

Senator LEVIN. What inflation factors do you use to calculate the total cost o this program? Are these factors lower or higher than those for these same com modities in recent history? If they are different than recent historical experience shows, why have you decided to use different rates?

Answer. Given the volatility and cyclic nature of many of the strategic and critical materials, no "inflation factors" are used to calculate the cost of the acquisitions. The market price of each material as of a certain date is used. These prices are those at which comparable materials are being traded or, in the absence of trading, the values are estimates.

Senator LEVIN. Will your stockpile purchases be candidates for "multi-year" procurement?

Answer. Yes. The Strategic and Critical Materials Stock Piling Act (Section 9(b)(3)) provides that acquisition moneys remain available for a period of five fiscal years if so provided in appropriation acts. Therefore, stockpile purchases can be spaced out over up to five years. However, the volatile nature of market fluctuations for some stockpile materials is a major problem in using multi-year contracts. If there appears to be a benefit to the Government, we would negotiate a long term contract which would probably include provision for changes in economic conditions.

Senator LEVIN. Wouldn't "multi-year" procurement of these materials tend to stabilize their prices in the world market and perhaps even permit the U.S. Government to avoid steep price fluctuations upward in unforeseen future circumstances?

Answer. Yes. However, the quantity of material purchased at any one time is limited by law to a quantity that will not cause undue market disruption. In addition, the Stock Piling Act states that the purpose of the stockpile is to serve the interest of national defense only and is not to be used for economic or budgetary purposes. This does not mean, however, that economic benefits can not accrue as a result of stockpile activities. The acquisitions proposed involve materials that have cyclical markets in many cases, and the stockpile purchase program will strive to be a stabilizing force in these markets while providing the lowest possible cost to the taxpayer.

Senator LEVIN. Do you intend to buy any materials under contracts obtained in non-competitive situations? If so, which ones and why? Will you buy any materials from foreign sources? If so, why? Can you give domestic supplies of these materials any preferences?

Answer. Yes. Noncompetitive contract situations will exist for some stockpile materials when there is only one producer. A request for competitive sealed bids would not be meaningful in this situation; therefore, negotiated contracts will be developed to obtain such materials. Beryllium metal and synthetic battery grade manganese dioxide are examples of materials produced by only one firm. When noncompetitive producers are used, the House and Senate Armed Services Committees will be notified as provided in section 6 of the Strategic and Critical Materials Stock Piling Act.

Materials will be purchased from foreign sources when the material is either not produced in the United States or is produced in very small quantities domestically. These acquisitions would include materials with a high import dependence such as cobalt, columbium concentrates, manganese, opium, and rutile.

Domestic and foreign suppliers will be treated equally. However, in cases where domestic supplies are available, U.S. producers will have the advantage of lower transportation costs and, in some cases, of tariff protection.

Senator LEVIN. GSA seems reluctant to declare its opposition to Senator McClure's bill, although FEMA shows no such hesitation. Is this an accurate characterization of GSA's position?

Answer. No. GSA deferred to FEMA to state the Administration's position regarding this bill. GSA supports the Administration's position as stated by FEMA.

Senator LEVIN. What is DOD's position on the McClure bill and its assessment of its strengths and weaknesses?

Answer. DOD opposes S. 1338, the McClure bill. In their assessment, they find that the strength of the bill lies in its simplicity in determining stockpile requirements. However, their assessment also revealed that the weakness in the bill is that the methodology proposed is not usable since it does not include requirements of intensified industrial demands during a heated mobilization economy.

Senator LEVIN. If the McClure bill became law, what would it cost the American taxpayer to accomplish the Reagan Administration's proposed $2 billion stockpile purchases program? Please explain any differences in price.

Answer. The cost estimates of the Adminstration acquisition program are based on current market prices for the materials proposed for purchase. The quantities of materials purchased are constrained by market factors, availability, and current consumption. If under the McClure goals, the same materials were purchased, then the cost to the taxpayer would be the same.

Senator LEVIN. How could the McClure bill be changed to make it more acceptable and workable?

Answer. The basic concept of import dependence as the sole criteria for stockpile goal calculation does not adequately provide for the national security because it does not allow for wartime supply, requirements, substitutions and shifts in the national economy. Therefore, no changes in S. 1338 which did not alter this basic concept would render it more acceptable and workable. Some provisions of the McClure bill are already being done: (1) an interagency committee to determine materials to be stockpiled already exists in the Annual Materials Plan Steering Committee; (2) the proposal to make adjustments for various forms of materials is being done by having subgoals for each "family group"

of basic materials; and (3) goal review every four years and changes only for those with greater than ten percent change. The 1976 goals were changed in 1980 only when movement exceeded ten percent.

THE MCCLURE BILL

Senator LEVIN. Mr. Donnelly, what is DoD's position on the McClure Bill and its assessment of its strengths and weaknesses?

Answer. The DoD does not support the McClure Bill. The apparent strength of the McClure Bill is its simplicity. The principal weakness of the McClure Bill is that calculations based on it are not usable. The McClure Bill bases calculations of stockpile quantities on peacetime import consumption vice consideration of intensified industrial demands during a heated mobilization economy.

Senator HUMPHREY. The subcommittee stands in adjournment until Friday morning at 10 a.m.

[Thereupon, at 10:50 a.m., the subcommittee adjourned to reconvene subject to the call of the Chair.]

STOCKPILE LEGISLATION

FRIDAY, JUNE 19, 1981

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

The subcommittee met in open session at 10:15 a.m., pursuant to notice, in room 212, Russell Senate Office Building, Senator Gordon Humphrey, chairman, presiding.

Present: Senators Humphrey and McClure.

Staff present: James C. Smith, professional staff member, and Marie Fabrizio Dickinson, staff assistant.

Also present: George Kohl, assistant to Senator Humphrey; John Etherton, assistant to Senator Jepsen: and Will Smith, assistant to Senator Jackson.

Senator HUMPHREY. Good morning.

This morning we are continuing our hearings on pending stockpile bills S. 906, the administration's bill which opposes the sale and acquisition of various strategic materials, and S. 1338, Senator McClure's bill to amend the Strategic and Critical Materials Stock Piling Revision Act to provide a formula for sizing the stockpile goals.

Today we will hear from Senator McClure on his bill, from the American Mining Congress, and from the Silver Users Association.

The time situation is such that the subcommittee cannot hear all outside witnesses who might want to testify. However I issue an invitation to anyone who might care to do so, to submit written testimony concerning these stockpile bills to be considered for inclusion in the public hearing record. I will keep the hearing record open for 7 days for that purpose.

We are in open session and I would expect today's session to remain unclassified.

Our first witness is the Honorable James McClure, U.S. Senator from Idaho, who is here to enlighten us on his bill, S. 1338. Good morning, Senator McClure.

STATEMENT OF HON. JAMES A. McCLURE, U.S. SENATOR, STATE OF IDAHO

Senator MCCLURE. Good morning, Mr. Chairman.

Mr. Chairman, I have a prepared statement. I would like to ask permission that the entire statement be placed in the record.

Senator HUMPHREY. It will be placed in its entirety in the record.

Senator MCCLURE. I will skip some portions of it, then, in my oral presentation.

[The prepared statement of Senator McClure follows:]

PREPARED STATEMENT OF SENATOR JAMES A. MCCLURE

Mr. Chairman, thank you for this opportunity to testify today on an issue of great concern to us all, the Critical and Strategic Materials Stock Pile. Let me say at the outset that I am here to testify to the contrary of the Wall Street Journal article of June 15, entitled "Big U.S. Silver Sale is Likely as Congress Reconciles Budget," which stated that, "Little debate is expected on either floor as the silver sales are relatively minor items in the 1982 budget reconciliation bills." From my perspective, this will not be the case in the Senate. I am strongly opposed to the Administration's proposal to sell all 139.5 million troy ounces of silver currently in the stockpile as I cannot agree with the rationale that silver is not a critical material. I am also opposed to the use of the National Stockpile to reduce the budget deficit. This is not the purpose of the National Stockpile and I will do whatever is possible to block this action. For this reason, I welcome the Subcommittee's neutral stance on the Administration's request until a close examination of this proposal has been undertaken.

It is appropriate that the two days of hearings the Subcommittee has scheduled, cover both: S. 1338, my bill to aline stockpile goals to import dependence, and S. 906, the Administration's stockpile disposal legislation. The relationship between the two is not symbiotic. I ask you today to closely review my proposal which recognizes the importance of our growing, dangerous foreign dependence. I ask you to question the Administration's decision to dispose of all 139.5 million ounces of silver from our National Stockpile under the pretense that it is not strategic and critical.

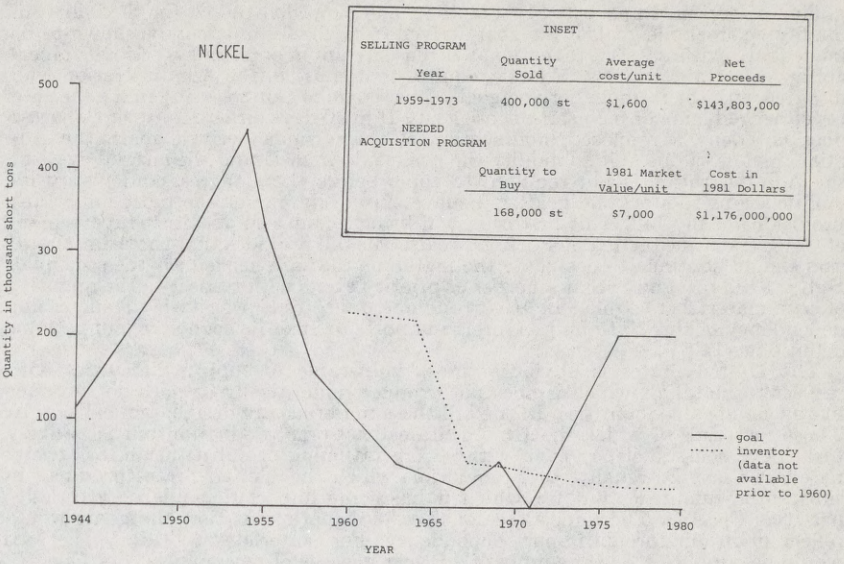
Since the inception of the Strategic and Critical Materials Stock Piling Act, the quantity of strategic and critical materials, (known as stockpile goals), needed in times of national emergencies has experienced erratic fluctuations. Previous Administrations have in the past, zeroed stockpile goals for primarily and budgetary and economic purposes with defense requirements being a secondary consideration. These frequent and violent shifts in stockpile goals have been costly to the American taxpayer and extremely disruptive to industry where planning for expansion has been frequently deferred when the stockpile became an active seller. In retrospect, these fluctuations can be shown to have been untimely, unjustifiable, and inexcusable. Neither our country's national defense needs nor our growing foreign dependence for materials which have been adequately considered. Notable critical stockpile materials which have been put through this roller coaster are aluminum, copper and nickel, most of the zinc, and about half of the lead held by the government were sold during the period 1963–1975. Subsequent to these sales, we were told that new stockpile goals had once again been established and that we were deficient in all of these materials.

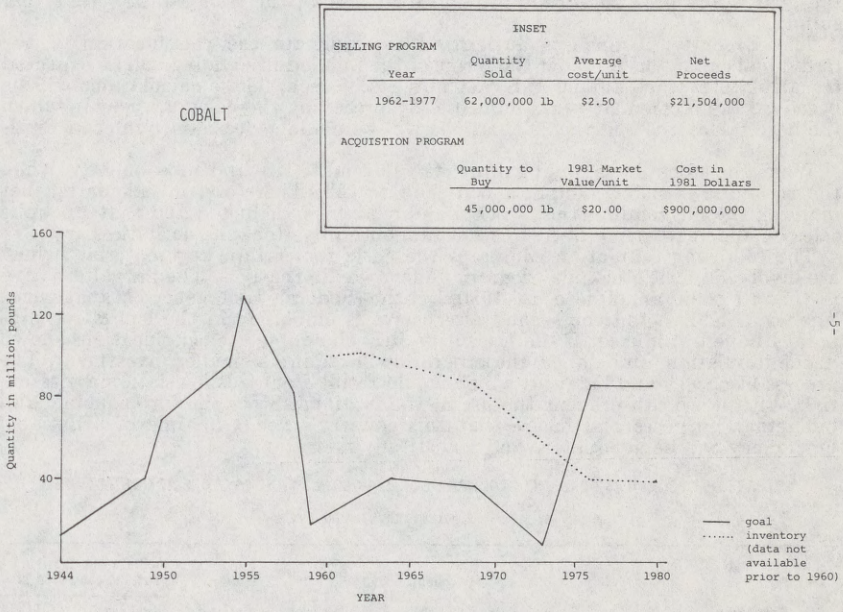
Documenting the up and down goals of these materials demonstrates the dramatic trends of the roller coaster the Strategic and Critical Materials Stock Piling Act is on. To dramatize this trend I have provided charts which I would like to go over with you.

The first chart is for the material nickel. From the graphic demonstration you can see how the stockpile goal has been erratically changed from 11,000 short tons in 1944 to 450,000 short tons in 1954 to 50,000 short tons in 1963 to 0 in 1971, and then back up again to 204,000 short tons in 1980. The inset on this chart shows the selling program undertaken by the government between the years 1959–1973. During this time the government sold 400,000 short tons at an average cost of $1,600 per short ton. The net proceed the government realized was $143,803,000. After selling 400,000 short tons, an acquisition program would be needed to reach the 1980 goal of 168,000 short tons. The value in 1981 is $7,000 per short ton. This is obviously a considerable increase from the cost over the selling period. If we were to buy 168,000 short tons in 1981 the cost would be $1,176,000,000. The increased cost to the taxpayer is astonishing.

The second chart regarding cobalt, shows a similar trend. In 1944 the goal for cobalt was 11,600,000 pounds. From there it begins on the roller coaster, 40,000,000 pounds in 1949 to 129,000,000 pounds in 1955, down to a low of 11,945,000 pounds in 1973 and then back up again to 85,415,000 pounds in 1980. The inset of this chart shows the selling program undertaken by the government between the years 1962–1977. During this time the government sold 62,000,000 pounds of cobalt at an average cost of $2.50 per pound. The net proceed the government realized was $21,504,000. We now have an acquisition program and we must buy 45,000,000 pounds. The value in 1981 is $20 per pound and the total cost to buy the 45,000,000 pounds will be $900,000,0000.

I do not want to have to come back in a year or five years and describe a similar situation for silver.





Through amendments to the Stockpile Act of 1979 Congress thought it had solved the problem of violent fluctuation in stockpile goals and the use of the National Stockpile for economic and budgetary purposes. However, the actions taken this year by both the Administration and the House Armed Services' Committee indicate that the 1979 amendments were not sufficient. The legislation I have introduced this year will mitigate these continuing trends by specifying a formula for determining the quantity of a material to be stockpiled. When I introduced this legislation in 1977, the Senate Armed Services Committee reported that it was "attracted to the simplicity of the goal setting approach but felt that the approach was too insensitive to actual wartime requirements and to the wartime vulner-

ability of certain imports." My bill then and now does allow for flexibility in modifying stockpile goals if the goal derived from the formula can be shown to be inadequate with respect to national defense requirements and wartime vulnerability of certain imports. My bill requires that those in the Administration who disagree with the formula derived goals, must come to Congress and make the case for either reducing or increasing those goals. If in 90 days either House of Congress does not deny a proposed modification of the formula derived goals, the Administration will be able to modify the goal as desired. Under the current system, the Administration is not required to come before the Congress and justify its modifications to stockpile goals. I believe this to be one of the most important provisions of my bill. This provision will bring about a more direct involvement of Congress in the setting of stockpile goals. The bill provides that the Administration should continue to designate the materials that are needed for the stockpile. But, the bill recognizes that an order of priority exists with respect to the quantity of each material stockpiled and that fundamental to that priority is the increasing dependency of this Nation upon foreign imports to meet its economic and national defense needs.

The United States is obviously most vulnerable to supply difficulties with respect to materials which it does not produce domestically or does not produce in any significant quantities. In the bill these materials are designated as Class A. Those materials of which the United States has some production but is unlikely to achieve self-sufficiency even with severe rationing or substitution, are designated as Class B. Finally, those materials which the United States produces in substantial quantities but for which it has some import dependence are designated as Class C. The importance of these designations is that the goals would reflect upon our foreign import dependency. For materials in Class A, the goal would be equal to a 3 year supply of a 5 year average of net imports. For Class B, the goal would be a 2 year supply and for Class C, the goal would be a 1 year supply.

The Executive Branch is authorized to designate the classification of the individual commodities under the terms of the bill and in so doing will be expected to calculate average annual U.S. net imports of each. These calculations will be based on the 5 calendar years immediately preceding the calendar year in which the determinations and the calculations will be made at least once in each Presidential term.

When the stockpile is buying, imports will tend to rise and subsequently, when the stockpile is selling, imports will tend to fall. Therefore, in calculating net imports, the bill requires that stockpile purchases be deducted and that stockpile sales be added to arrive at figures not influenced by stockpile activities.

The following tabulation compares the costs for certain key materials which are involved in the stockpile program under two alternatives. The first alternative is the program announced in 1980 by the Federal Emergency Management Agency (FEMA) and the second alternative is embodied in the legislative proposal I have introduced. If the Executive Branch adopts the classifications shown in the tabulation, on balance, the program will require a smaller investment. The process of checks and balances which would result from this legislation are essential. With it we can prevent the use of the National Stockpile for economic and budgetary purposes and insure that this country's needs in time of a national emergency can be adequately and realistically met.

STRATEGIC STOCKPILES—PRESENT STOCKPILE GOALS, HOLDINGS, AND McCLURE ACT OBJECTIVES

[Figures in thousands]

Commodity	Class	Sept. 30, 1980 holdings	FEMA 1980 goal	McClure Act goal	McClure Act deficiency or surplus compared to—	
					Holdings	FEMA
Alumina and bauxite, long dry tons	A	14,158	27,600	19,720	−5,562	−7,880
Aluminum, short tons	C	2	700	265	−263	−435
Antimony, short tons	B	41	36	37	+4	+1
Cobalt, pounds	A	40,802	85,400	54,000	−13,198	−31,4000
Copper, short tons	C	29	1,000	263	−234	−737
Lead, short tons	C	601	1,100	66	+525	−1,034
Nickel, short tons	B	0	200	360	−360	+160
Palladium, troy ounces	A	1,255	3,000	2,688	−1,433	−312
Platinum, troy ounces	A	453	1,310	2,976	−2,523	+1,666
Silver, troy ounces	B	139,500	0	81,520	+57,980	+81,520
Tin, long tons	A	200	42	150	+50	+108
Zinc, short tons	B	376	1,425	1,396	−1,020	−29

Last week the House Committee on Armed Services completed its work on the Administration's stockpile disposal legislation. I would like to comment on this as there was a major difference between the Subcommittee which conducted the hearings and the Full Committee. Under the good direction of Congressman Bennett, the subcommittee reported out the Administration's proposal without the recommended disposal of 139.5 million troy ounces of silver. In addition, Mr. Bennett included language to eliminate the provision in the current law that limits the availability of appropriated funds for the purchasing of stockpile materials to five years and the provision that provides that funds remaining in the Stockpile Transaction Fund for three fiscal years would revert to miscellaneous receipts of the Treasury. I support Mr. Bennett's actions and his insight regarding silver as a critical and strategic mineral as well as the use of the National Stockpile for defense purposes only. On the Full Committee level Mr. Bennett's actions to not authorize the disposal of silver were reversed. In a letter from Chairman Melvin Price of the House Armed Service Committee to Chairman James Jones of the House Committee on the Budget, Mr. Price recommended, "The authorization for disposal of quantities of materials is included in order to satisfy the reconciliation instruction of the House." This is a violation of the Strategic and Critical Materials Stockpile Act which reads as follows:

"SEC. 3(b)(1). The purpose of the stockpile is to serve the interest of national defense only and is not to be used for economic or budgetary purposes."

There is no doubt in my mind that this type of action will be continued in the future by both Congress and the Administration. We must make a change and at the same time we must not allow the disposal of silver or any other stockpiled material for this purpose. A zero stockpile goal for silver is not realistic.

We are a nation dangerously and costly dependent on foreign nations for strategic and critical materials. Presently, of the 32 minerals and materials identified as strategic and critical to the U.S. in terms of national security we are dependent on foreign sources in excess of 50% for 25 minerals. We simply cannot afford to overlook this and expect the current stockpile to realistically meet our needs. What will we do? Will we turn to our allies who have no stockpiles to speak of? Will we depend on continued imports across sea lanes which would be subject to unsafe passage? Will we depend on imports from countries close by whose own demands may infringe upon the quantity of exports it will allow? Excessive dependence is dangerous. It is sometimes argued that we can depend on supplies from countries in the Western Hemisphere, but is that always the case? In 1973, during the Arab oil embargo, the Canadian National Energy Board realized its oil supplies were limited. In 1974, the Canadian National Energy Board declared that Canadian oil supplies would not be adequate to serve traditional Canadian markets. The Canadian government therefore imposed export restrictions, with the goal of reducing exports to zero by 1983. In addition, an export tax was levied on oil shipments to the U.S. The U.S. Senate passed Senate Resolution 249 on January 24, 1974, condemning Canada, along with Venezuela and the Arab oil producing countries for actions which raised the price of oil. In subsequent months, however, most American observers came to accept the fact that Canada's energy supplies were not limitless, and that Canada was within its rights to exercise reasonable prudence in their exploitation. Mineral supplies are also not limitless and we must look at the possibility of such an activity occurring again in the area of mineral import-exports with Canada as well as with other friendly countries. These are issues and questions we must address now not at a time of national emergency.

Foreign dependence is only one of many reasons to question the disposal of stockpiled silver. During World War II the silver stocks of the U.S. Treasury were essential to wartime industrial and strategic needs. Treasury figures published in the Silver Transactions of the Bureau of the Mint, 1937–1971, indicate sales totaling 1.6 billion ounces made between 1941 to 1946. These sales included: 140 million ounces for U.S. industrial uses, 72 million ounces for coinage in the Philippines, 139 million ounces for U.S. manufacturing, 411 million ounces to allies for minting coins and other strategic purposes, and 902 million ounces to the Reconstruction Finance Corporation.

The intrinsic value of silver as money or in trading should not be underestimated for strategic purposes. This unique characteristic demands a special consideration among other stockpile items.

Consumption of silver is not decreasing. On the contrary more silver is being used in newer photographic techniques, solar power, electronics, etc. With new technology, this trend of increasing consumption will continue at a time when production is decreasing. According to the Silver Institute, world mine produc-

tion of silver dropped from 345 million ounces in 1979 to 331 million ounces in 1980. While 16 countries produced more silver in 1980 than in 1979 and 18 countries produced the same amount, there were 28 nations that decreased their mine production of silver. Included in the list of countries decreasing production were six of the largest silver producers in the world: Mexico, Peru, Canada, United States, Australia, and Poland. The United States alone decreased from 38 million ounces in 1979 to 30 million in 1980. The Soviet Union, with a mine production of almost 50 million ounces had the largest mine production of silver in the world in 1980.

There is a projected increase of 7 percent in global mine production of silver for 1981. However, any strikes, or other unforeseen operational delays can affect this projection. For instance in 1980 these negative events were so pronounced that for the first time since 1974, there was a decrease from the previous year in world mine production of silver. Projections for the noneastern bloc countries were found to be 9 percent less than had been projected one year ago, 15 percent less than had been projected two years ago, and 14 percent less than had been projected four years ago. The immediate future of silver production is questionable. But the demand is not.

Mr. Chairman and members of the subcommittee, these are issues we must address now, not at a time of national emergency. Thank you for this opportunity to begin such a process.

Senator McClure. First, Mr. Chairman, I want to thank you for this opportunity to testify today on an issue of great concern to us all, the critical and strategic materials stockpile. Let me say at the outset that I am here to testify to the contrary of the Wall Street Journal article of June 15 entitled "Big U.S. Silver Sale Is Likely As Congress Reconciles Budget," which stated that little debate is expected on either floor as the silver sales are relatively minor items in the 1982 budget reconciliation bills.

From my perspective this will not be the case in the Senate. I am strongly opposed to the administration's proposal to sell all 139.5 million troy ounces of silver currently in the stockpile as I cannot agree with the rationale that silver is not a critical material. I am also opposed to the use of the national stockpile to reduce the budget deficit. This is not the purpose of the national stockpile and I will do whatever I can to block that action. For this reason I welcome the subcommittee's neutral stance on the administration's request until a close examination of this proposal has been undertaken.

It is appropriate that the 2 days of hearings the subcommittee has scheduled cover both S. 1338, my bill to align stockpile goals to import dependence, and S. 906, the administration's stockpile disposal legislation. The relationship between the two is not symbiotic. I ask you today to closely review my proposal which recognizes the importance of our growing dangerous foreign dependence. I ask you to question the administration's decision to dispose of all 139.5 million ounces of silver from our national stockpile under the pretense that it is not strategic and critical.

Previous administrations have in the past zeroed stockpile goals for primarily budgetary and economic purposes with defense requirements being a secondary consideration. These frequent and violent shifts in stockpile goals have been costly to the American taxpayer and extremely disruptive to industry where planning for expansion has been frequently deferred when the stockpile became an active seller.

In retrospect these fluctuations can be shown to have been timely, unjustifiable, and inexcusable. Neither our country's national

defense needs nor our growing foreign dependence for these materials have been adequately considered.

Documenting the up and down goals of these materials demonstrates the dramatic trends and the roller coaster the Strategic and Critical Materials Stock Piling Act is on. To dramatize this trend I have provided charts which I would like to go over very briefly with you.

The first chart is for the material nickel. From the graphic demonstration you can see how the stockpile goal has been erratically changed from 118,000 short tons in 1944 to 450,000 short tons in 1954 to 50,000 short tons in 1963 to zero in 1971, and then back up again to 204,000 short tons in 1980.

The inset on this chart shows the selling program undertaken by the Government between the years 1959 to 1973. During this time the Government sold 400,000 short tons at an average cost of $1,600 per short ton. The net proceeds the Government realized was $143,803. After selling 400,000 short tons, an acquisition program would be needed to reach the 1980 goal of 168,000 short tons. The value in 1981 is $7,000 per short ton. This is obviously a considerable increase from the cost over the selling period. If we were to buy this 168,000 short tons in 1981, the cost would be $1.176 billion. The increased cost to the taxpayers is astonishing.

Let me just rephrase that. We sold it off at $143 million, enough to meet the goals that we now have which will cost us $1.176 billion to buy it back.

The second chart regarding cobalt shows a similar trend. In 1944 the goal for cobalt was 11.6 million pounds. From there it begins on the roller coaster: 40 million pounds in 1949 to 129 million pounds in 1955 down to a low of 11,945,000 pounds in 1973 and then back up again to 85,415,000 in 1980.

The inset on this chart shows the selling program undertaken by the Government between the years 1962 to 1977. During this time the Government sold 62 million pounds of cobalt at an average cost of $2.50 per pound. The net proceeds the Government realized was $21,504,000. We now have an acquisition program and we must buy 45 million pounds. The value in 1981 is $20 per pound and the total cost to buy the 45 million pounds will be $900 million.

Now again to recap, we sold and got $21 million and now we are going to buy back at $900 million.

I do not want to have to come back in a year or 5 years and describe a similar situation for silver. Through amendments to the Stockpile Act of 1979, Congress thought it had solved the problem of violent fluctuations in stockpile goals in the use of the national stockpile for economic and budgetary purposes.

However the actions taken this year by both the administration and the House Armed Services Committee indicate that the 1979 amendments were not sufficient. The legislation I have introduced this year will mitigate these continuing trends by specifying a formula for determining the quantity of a material to be stockpiled.

My bill does allow for flexibility in modifying stockpile goals if the goal derived from the formula can be shown to be inadequate with respect to national stockpile requirements and wartime vulnerability of certain imports. My bill requires that those in the administration

who disagree with the formula-derived goals must come to Congress and make the case for either reducing or increasing those goals.

If in 90 days either House of Congress does not deny a proposed modification of the formula-derived goals, the administration will be able to modify the goal as desired. Under the current system, the administration is not required to come before the Congress and justify its modifications in stockpile goals.

I have to add at that point that, of course, we do have congressional oversight over the sales as well as over the appropriated funds to purchase. But the goals themselves are beyond direct congressional control under the current legislation.

I believe this provision in my bill is one of the most important. This provision will bring about a more direct involvement of Congress in the setting of stockpile goals. The bill provides that the administration should continue to designate the materials that are needed for the stockpile. But the bill recognizes that an order of priority exists with respect to the quantity of each material stockpiled and fundamental to that priority is the increasing dependency of this Nation upon foreign imports to meet its economic and national defense needs.

The United States is obviously most vulnerable to supply difficulties with respect to materials which it does not produce domestically or does not produce in any significant quantities. In the bill these materials are designated as "class A." Those materials of which the United States has some production but is unlikely to achieve self-sufficiency even with severe rationing or substitution are designated as "class B." Finally those materials which the United States produces in substantial quantities but for which it has some import dependence are designated "class C."

The importance of these designations is that the goals would reflect upon our foreign import dependency. For materials in class A the goal would be equal to a 3-year supply of a 5-year average of net imports. For class B the goal would be a 2-year supply and for class C the goal would be a 1-year supply.

The executive branch is authorized to designate the classification of the individual commodities under the terms of the bill and in so doing will be expected to calculate average annual U.S. net imports of each.

The following tabulation compares the cost for certain key materials which are involved in the stockpile program under two alternatives. The first alternative is the program announced in 1980 by the Federal Emergency Management Agency, FEMA, and the second alternative is embodied in the legislative proposal I have introduced.

Last week the House Committee on Armed Services completed its work on the administration's stockpile disposal legislation. I would like to comment on this as there was a major difference between the subcommittee which conducted the hearings and the full committee.

Under the good direction of Congressman Bennett, and I might interject here that there has been no one in the House of Representatives more active and more concerned with the stockpile legislation, goals and management than has been Congressman Bennett over the years. Under his direction the subcommittee reported out the administration's proposal without the recommended disposal of 139.5 million troy ounces of silver.

In addition Mr. Bennett included language to eliminate the provision in the current law that limits the availability of appropriated funds for the purchasing of stockpile materials to 5 years and the provision that provides that funds remaining in the stockpile transaction fund for 3 fiscal years would revert to miscellaneous receipts for the Treasury.

I support Mr. Bennett's actions and his insight regarding silver as a critical and strategic mineral as well as the use of the national stockpile for defense purposes only.

On the full committee level Mr. Bennett's actions to not authorize the disposal of silver were reversed. In a letter from Chairman Mel Price of the House Armed Services Committee to Chairman Jim Jones of the House Committee on the Budget, Mr. Price recommended:

> The authorization for disposal of quantities of materials is included in order to satisfy the reconciliation instruction of the House.

This is a violation of the Strategic and Critical Materials Stock Piling Act which reads as follows:

> Section 3(b)(1). The purpose of the stockpile is to serve the interest of national defense only and is not to be used for economic or budgetary purposes.

There is no doubt in my mind that this type of action will be continued in the future by both Congress and the administration. We must make a change and at the same time we must not allow the disposal of silver or any other stockpiled material for simply budgetary purposes.

A zero stockpile goal for silver is simply not realistic, and I think we all know it. The reason it is there is to generate sales to generate money for the Treasury and for no other reason. To indicate that we can get by with absolutely no silver in the stockpile is blatantly absurd.

We are a nation dangerously and costly dependent on foreign nations for strategic and critical materials. Presently, of the 32 minerals and materials identified as strategic and critical to the United States in terms of national security, we are dependent on foreign sources in excess of 50 percent for 25 minerals. We simply cannot afford to overlook this and expect the current stockpile to realistically meet our needs.

Excessive dependence is dangerous. It is sometimes argued that we can depend on supplies from countries in the Western Hemisphere. But is that always the case? In 1973 during the Arab oil embargo the Canadian National Energy Board realized its oil supplies were limited. In 1974 the Canadian National Energy Board declared the Canadian oil supplies would not be adequate.

The Canadian Government therefore imposed export restrictions with the goal of reducing exports to zero by 1983. In addition an export tax was levied on oil shipments to the United States. The United States passed Senate Resolution 249 on January 24, 1974, condemning Canada along with Venezuela and the Arab oil-producing countries for actions which raised the price of oil. In subsequent months however, most American observers came to accept the fact that Canada's energy supplies were not limitless and that Canada was within its rights to exercise reasonable prudence in their exploitation.

Mineral supplies are also not limitless and we must look at the possibility of such an activity occurring again in the area of mineral

import-exports with Canada as well as with other friendly countries. These are issues and questions we must address now, not at a time of national emergency.

Foreign dependence is only one of many reasons to question the disposal of stockpiled silver. During World War II the silver stocks of the U.S. Treasury were essential to wartime industrial and strategic needs. Treasury figures published in the silver transactions of the Bureau of the Mint from 1937 to 1971 indicated sales totaling 1.6 billion ounces made between 1941 to 1946.

Consumption of silver is not decreasing. On the contrary, more silver is being used in newer photographic techniques, solar power, electronics, et cetera. With new technology this trend of increasing consumption will continue at a time when production is decreasing. According to the Silver Institute, world mine production of silver dropped from 345 million ounces in 1979 to 331 million ounces in 1980.

While 16 countries produced more silver in 1980 than in 1979, and 18 countries produced the same amount, there were 28 nations that decreased their mine production of silver. Included in the list of countries decreasing production were six of the largest silver producers in the world: Mexico, Peru, Canada, United States, Australia, and Poland. The United States alone decreased from 38 million ounces in 1979 to 30 million ounces in 1980. The Soviet Union with a mine production of almost 50 million ounces had the largest mine production of silver in the world in 1980.

The immediate future of silver production is questionable. But the demand is not. Mr. Chairman and members of the subcommittee, these are issues we must address now, not at a time of national emergency. I thank you for this opportunity to begin such a process.

Senator HUMPHREY. Thank you, Senator McClure, for an excellent statement.

May we ask you a few questions, Senator McClure?

Senator MCCLURE. Please.

Senator HUMPHREY. As you know, the administration is not among the most enthusiastic supporters of your bill. The essence of the criticism is that in computing stockpile goals based only on the degree of import dependence, we are not adequately considering mobilization needs. How do you respond to this criticism?

Senator MCCLURE. There are a number of ways to respond: First of all, to indicate as I did in my statement that if as a matter of fact these formula-derived goals are not sufficient that then they can come before the Congress and say what the goals ought to be.

But let me suggest to them that if as a matter of fact these formula-derived goals are not sufficient, look what has happened over the past. Look at the way those goals have gone up and down. Look at the way they have driven purchases and sales almost in every instance to the long-term disadvantage to the taxpayer. So there is both an escape mechanism in the egislation to allow them to establish different goals and also the past record would indicate that even if it were inflexible and had shortcomings, those shortcomings would not be nearly as large as the use of the present system.

Senator HUMPHREY. Your evidence is certainly persuasive on that point and I commend you for trying to find a way to remove economic

and budgetary, if not political, considerations from the management of the strategic stockpile.

Your bill proposes certain stability mechanisms. The major provision to the Strategic and Critical Materials Stock Piling Act of 1979 also proposed a stabilizing mechanism; namely, that Congress be notified of any proposed goal changes 30 days before they can become effective. Why do you feel that that is not sufficient safeguard?

Senator McCLURE. It seems to me that the first reason for the amendment to the Strategic and Critical Materials Stock Piling Act is to establish a formula to provide a constant approach to setting stockpile goals. In addition I believe it is important to relate those goals more directly to import dependence. But there ought to be some objectivity in establishing these goals.

Certainly the past would indicate that the goal changes have been more subjective than objective, oftentimes driven by economic considerations which are specifically prohibited by the terms of the act. But nevertheless it has happened.

I have not been here a terribly long time. This is only my 15th year. But I have seen a number of administrations in those years, and in everyone of those administrations I have seen stockpile changes which they would confess were driven by budgetary considerations, not national security considerations.

Now the stockpile should not be treated by this or any other administration as a kind of a slush fund to aid other spending programs. Yet that is precisely what I see happening here in the proposed sale for silver. That is precisely what has occurred at periodic times in the past under other administrations. The temptation is just too great for even dedicated administrations and OMB directors to avoid the temptation to reach in and grab a little free cash by sale of some commodities that they can make available by changing stockpile goals.

Senator HUMPHREY. Of course they can only spend the money generated on further purchases, but it tends to make the books look better in the interim.

Senator McCLURE. It tends to make the books look better in the interim, but you can see that happening right now because the sale of silver will generate more money than they propose to spend out of that fund. It is obvious therefore that all it is, is a part of the budgetary action that wants to make the books look a little better in the short term.

But what happens to the taxpayer when we reverse that and start buying back? And what happens to national security in the meantime?

Senator HUMPHREY. The House Armed Services Committee issued a report on industrial preparedness and in it said that the administration's goals for the strategic stockpile were too low. I believe the language they used was "much too low." What is your opinion on that comment?

Senator McCLURE. I think in some areas they are much too low. If you will look at the chart I prepared, just on the basis of the dependence upon imports, just by that formula-derived goal which I have stated in my bill, you can compare the holdings with the goal that would be established for the metals that are listed on that table. You could also compare those with FEMA. In many instances the FEMA goals established now are much higher than are the ones that would be established under my bill.

I think if they can justify the reason for that higher goal, then certainly it ought to be permitted to be established. But in one glaring example, one out of the whole list, the sale of silver, we have zeroed out the stockpile requirement. And there is no rational explanation for that with one single exception, and that is money; get cash.

Senator HUMPHREY. But why not sell some of these other materials and reduce the goals? Is silver more liquid? Is that the essence of the situation?

Senator MCCLURE. It happens to be if you can simply state that you do not need any and sleep with yourself and your conscience after having said that.

Senator HUMPHREY. That reasoning could have been applied to almost any of the commodities. Why was it applied to silver?

Senator MCCLURE. Silver is more liquid and the dollars are there. You know, it is easy to sell silver. Bunker Hunt is not the only one who likes it. I notice that the silver users appear and testify every time they have a chance to get their hands on cheap Government silver in an action that will depress the price of silver. They have been doing that for years. They have raped the taxpayer continuously.

Senator HUMPHREY. Let me ask you a few questions about your testimony if you have time.

Senator MCCLURE. Yes, sir.

Senator HUMPHREY. Your feeling is that silver is strategic and critical. The FEMA holds presently, that it is not. Why do you feel that it is?

Senator MCCLURE. Look at the consumption of silver for items that are critical. Silver is not just a monetary commodity and it is not just a jewelry commodity and it does not just make flatware or hollowware for esthetic purposes. It is an industrial commodity of growing importance in our industry in electronics, in photography, in space, in a number of very important areas where silver is a preferred material for its industrial qualities and qualifications.

It is a comparison between those industrial uses and our capacity to produce that I think ought to drive the stockpile requirement. It certainly is not zero.

Now I might note that my bill would permit the disposal of some of that stockpile. The current holdings of silver are 139.5 million ounces. The formula-derived goal under my bill would be 81,520,000 ounces. Therefore there would be under the formula-derived goals in my bill available for sale 57,980,000 ounces.

One of the provisions and one of the reasons this stockpile goal is so nonsensical is that in addition to the other provisions of the Stockpile Act, the disposal is required to be in such a way that it does not disrupt the market. There is not any way you can sell 139 million ounces without disrupting the market. The result would be that they will have to phase those over quite a period of time, and it is not going to have the budgetary impact in terms of dollars generated for the Treasury that OMB has apparently looked at unless they completely ignore the other provisions of the statute.

Senator HUMPHREY. There is some difference of opinion on the market impact of that kind of sale.

In your bill, if an administration chose to modify the formula-derived goals they would become effective essentially unless within 90 days either House of Congress denied the modification. Suppose you had a Congress in the same budgetary straits as this one is. Would not another Congress like this be willing to go along, to wink and to simply sit on its hands and let such a change be made?

Senator McCLURE. Mr. Chairman, there is nothing that guarantees that Congress will be more responsible than an administration. All you can do in a system such as ours is to give the opportunities for the checks and balances to work. Is the Congress about to go along with a total elimination of silver in the stockpile? And is that a responsible action?

I think certainly if the Congress goes along with it under the budgetary constraints that we have, it is an illustration that the present law is no guarantee of protection against that kind of action by the administration and Congress.

Senator HUMPHREY. You noted you had been here only 15 years. I have been here only 2½ years.

What recourse is there to a situation in which Congress violates a statute which itself created? I am referring to your testimony.

Senator McCLURE. The Congress has the capacity to change the law. It ought not to act in contravention of a law unless it is also willing to repeal or amend the law which prohibits its action.

Now the courts in construction will likely say that the latest action of the Congress controls the earlier action by the Congress and that although we have set in the law the provision that there would be no use of the stockpile for budgetary reasons, the courts would likely say that the later action of the Congress authorizing the sale is a modification of that provision.

Senator HUMPHREY. I see. That is an interesting insight. Thank you.

I have one last question, if I may. As a Senator from a silver-producing State, you have a special expertise in this area, I would imagine. Why is it that so many countries, especially those on which we have relied, have seen a decline in silver production in recent years? What is behind that?

Senator McCLURE. There are a number of reasons. First of all mining is a gamble at best and it requires long leadtimes and massive investments of capital. So whenever the market goes up there would be a lag before increasing investment would yield increasing production. When markets are uncertain or go down, those capital investments simply are not made.

Recovery of any material in mining is not simply an automatic process. The ore bodies change. The richness or the return on mining activities changes according to the change in that ore body. And it requires changes in investment in order to recover. There is not anything that you can do in the short term to change production levels dramatically when there is declining production from existing ore bodies.

There also in recent years have been strikes that have held up production, in my State in particular. But it is primarily I think

related over the longer term to the risk return ratio of the availability of capital and the opportunity to make other investments, even just Treasury bills, that have a higher rate of return than the return after tax investment in mining.

Senator HUMPHREY. Certainly all of those conditions are applicable to this country and I can understand why production would have declined for those reasons. But at the same time it is declining in other countries such as Canada, Australia, and Mexico. Is it for the same reason?

Senator MCCLURE. I am not sure that I can analyze the reasons why it occurs in other places, but capital is very fluid and it goes to the place where the return is the greatest. The return in mining has not necessarily been the greatest in recent years. Historically, over decades, centuries, the relationship between gold and silver has been a 35-to-1 relationship. Silver is far below that today and the decline in that ratio may affect the investment decisions of people who have the opportunity to make investments and decide where those investments should go.

So the return on invested capital and mining silver, unless it is a very rich mine indeed, is not as attractive as the alternative of investing capital in some other form of mining.

You see capital moving in and out of production of copper according to the market. You see mines close. You see mines open. You see that sometimes is affected by what happens in foreign countries. And the more the foreign disruption occurs in areas of metal production, the more you will see domestic activity. But we have not seen the disruption in the foreign areas of silver production as much as we have in the production of some of the other materials.

Senator HUMPHREY. Thank you, Senator McClure, for your excellent testimony and responses to questions. We look forward to working with you on this matter.

Senator MCCLURE. Thank you very much.

Senator HUMPHREY. Our next witness is Dr. Simon Strauss, chairman of the American Mining Congress, Minerals Availability Committee.

Good morning, Dr. Strauss.

STATEMENT OF SIMON D. STRAUSS, CHAIRMAN, AMERICAN MINING CONGRESS, MINERALS AVAILABILITY COMMITTEE

Dr. STRAUSS. Good morning, Senator.

Senator HUMPHREY. Did you see any "silver linings" in Senator McClure's testimony?

Dr. STRAUSS. Yes, Mr. Chairman. Senator McClure has succinctly stated many of the points that are contained in my own statement. And as he has done, I will also submit my full statement for the record in the interests of conserving time. I will go through the statement and try to supplement what Senator McClure has said rather than simply repeat what he has said.

Senator HUMPHREY. Thank you.

Will you tell us what the American Mining Congress is all about and who makes up its membership?

Dr. STRAUSS. Yes. The American Mining Congress is a trade association located here in Washington, the membership of which covers in essence all of the mining industries or mineral industries with the exception of petroleum and natural gas. It includes people in iron ore, coal, cement, various nonmetallic materials, and the principal nonferrous metals. It has a very substantial membership.

It represents the mining industry in all the legislative and administrative policy decisions that are made here in Washington that affect the mining industry. Of course in recent years with the proliferation of environmental regulations and so forth, it has been a very active association.

In addition to the fact that I chair the committee of the Mining Congress, I should identify my background in two ways. One, during World War II, I was an official of the Metals Reserve Company, a Government corporation which handled the procurement of strategic materials for the war effort. I served in that capacity from early 1941 before Pearl Harbor until the end of 1945.

Since then I have been identified with the American Smelting & Refining Co., now known as Asarco, Inc. This is a company engaged in the production of minerals, not only in the United States. We also have significant interests in such places as Australia, Canada, Mexico, and Peru.

If you wish me to, after I complete my statement, I would be glad to shed some light on the last question you directed to Senator McClure.

Senator HUMPHREY. I wish you would. You are well qualified to respond.

[The prepared statement of Dr. Strauss follows:]

PREPARED STATEMENT OF SIMON D. STRAUSS, CHAIRMAN, AMERICAN MINING CONGRESS, MINERALS AVAILABILITY COMMITTEE, AND CONSULTANT, ASARCO, INC.

I am Simon D. Strauss and I appear before the Committee as Chairman of the Minerals Availability Committee of the American Mining Congress, a trade association, to present views both on S. 1338, a bill introduced by Senator McClure to revise the procedures for establishing stockpile goals, and S. 906, a bill introduced by Senator Humphrey to authorize acqusition and disposals of materials in connection with the National Defense Stockpile. I am consultant to and former Vice Chairman of Asarco Incorporated, a company engaged in the production of minerals in the United States. The company has significant interests in mining in Australia, Canada, Mexico and Peru.

I will deal first with S. 1338, Senator McClure's bill. This bill addresses a stockpile problem that has long concerned the mining industry. Since its inception the stockpile program has been based on goals—sometimes also called targets or objectives—established not by the Congress but by the Administrative agencies. The intent has been to establish goals that would insure an adequate supply of strategic and critical materials essential to the nation's security in times of military emergency.

Understandably, concepts of security change from time to time. Political events alter the perceptions of the security of the sources of materials on which this country is import dependent. Ideas with respect to the length or nature of military conflicts change. The law specifies that the stockpile is to be used for defense purposes and to meet national emergencies. Budgetary considerations or other economic factors—such as the fight on inflation—are not supposed to influence the establishment of stockpile goals.

The history of the stockpile has been that goals have been changed with great frequency and great volatility. Large objectives have been adopted at times, later to be completely eliminated. The Congress has been asked to authorize the dis-

posal of materials declared surplus as a consequence of such changes. After sales have been completed, new developments have occurred that cause the administrative agencies to decide they need the material after all. Goals are then reinstated or increased.

This erratic history imposes heavy costs on the taxpayer. It creates grave problems for industry—producers and consumers alike. Although efforts are made to buy or sell materials without disrupting the market (in accordance with an injunction in the Stockpile act), it is of course a fact of economic life that every purchase and every sale inevitably influences the market.

As an evidence of the erratic pattern of stockpile programming, I will briefly summarize the history of six specific metals. These have involved many billions of dollars in purchase and sales. These events have occurred in the last twenty years. They are not isolated examples. Many similar cases could be cited but time does not permit an extended analysis of the entire program. The commodities are copper, aluminum, nickel, lead and zinc—the five largest tonnage base metals—plus cobalt, a commodity involving smaller tonnages but absolutely essential in the production of military hardware.

COPPER

Early in the stockpile program the copper goal was set at 3,500,000 tons but by 1963 this had been reduced to 775,000 tons and in 1973 it was completely eliminated. At the end of 1962 the stockpile contained 1,135,000 tons; by the end of 1972 this had been cut to 259,000 tons and in 1973 and 1974 substantially all of this was sold. A fresh look in 1976 caused the Committee to reestablish a copper goal. Currently this is 1,000,000 tons.

ALUMINUM METAL

In addition to bauxite, the ore from which aluminum is obtained, the stockpile early included a goal for aluminum metal. In 1954 it reached a peak of 2,500,000 tons. By 1963 this goal had been cut to 450,000 tons and in 1972 the goal was completely eliminated. At one time the stockpile contained 1,270,000 tons of aluminum. All of this was subsequently sold. As a result of the re-evaluation of 1976 subsequent years, there is currently a goal of 700,000 tons with none on hand.

NICKEL

By 1952 the stockpile authorities decided the desired holding was 450,000 tons. This was reduced to 50,000 tons in 1963 and eliminated in 1971. As of December 1962 the stockpile held almost 220,000 tons of nickel—all of which was sold prior to 1972. The current objective for nickel is 200,000 tons.

LEAD

Stockpile goals for lead were successively increased to reach a peak of 1,154,000 tons in 1956. By 1963 the goal was entirely eliminated. At the end of 1962 the stockpile held 1,385,000 tons—somewhat above the maximum objective. Periodic sales have reduced this to about 600,000 tons. Meanwhile, the inter-agency committee has changed its mind and currently believes the goal should be 1,100,000 tons—or close to the previous peak and well in excess of current holdings.

ZINC

Stockpile goals for zinc have followed a similar pattern to lead. The previous m aximum objective was 1,500,000 tons, set in 1950. By 1963 this had been reduced t o zero. At the end of 1962 the stockpile actually held 1,580,000 tons—or more t han the peak objective. Sales have whittled this down to the present holdings of 372,000 tons. Meanwhile there has been a complete reversal of position on zinc and the current goal is 1,425,000 tons.

COBALT

The goal for this strategic material has never been completely eliminated but it was greatly reduced from the peak of 129,000,000 pounds set in 1955, to 11,-945,000 pounds by 1973. As a consequence of the holdings of about 100,000,000 pounds on hand at the end of 1963, some 60,000,000 pounds was sold at prices ranging from $2 to $4 a pound. The political upheaval in Zaire caused some

rethinking as to cobalt goals, which now stand at 85,400,000 pounds. In announcing resumption of stockpile purchases, the Federal Emergency Management Agency stated that the first program would be to acquire 1,200,000 pounds of cobalt. The current price is $20 a pound, five to ten times the price realized on stockpile sales.

In the light of this history, the American Mining Congress supports S. 1338 in the belief that it will lead to a more stable and more responsible approach to the establishment of stockpile goals. Obviously the formula suggested in S. 1338 will not precisely fit every commodity at all times. But the bill makes allowance for such contingencies by providing the administrative agencies with the option of establishing individual commodity goals outside the formula—provided they supply the Congress with the reasons why the formula is not appropriate in each instance.

The Mining Congress strongly endorses S. 1338, which is an update of a bill first introduced by Senator McClure as S. 1810 in the 95th Congress in 1977.

Turning now to S. 906, the bill that would authorize acquisition and disposal of materials, I wish to comment on the proposed disposition of 139,500,000 ounces of silver—representing the entire holding of silver in the stockpile. Of the seven materials the bills seek authority to sell, silver is the only one for which the stockpile objective is now zero. In the case of the six other materials proposed for sale, a goal remains on the books. The proposed disposals will reduce but not eliminate stockpile holdings. Only in the case of silver is it proposed that none be held in stockpile.

I have already cited the five major base metals for which all stockpile goals were eliminated in the past, only to be reinstated later—copper, aluminum, nickel, lead and zinc. Is there a parallel with the situation in silver? How likely is it that at some future date the stockpile planners will decide they need a silver goal?

In a document entitled "Questions and Answers—National Defense Stockpile" FEMA dealt with the silver issue. It stated that U.S. production is in excess of defense needs; that U.S. and Canadian production is sufficient to cover all defense wartime needs and essential civilian requirements with provision for most general needs, and that U.S., Canadian and Mexican imports alone could supply 120 percent of U.S. wartime needs. It analyzed other aspects. In response to a question regarding silver being used for "copper bars in World War II" the explanation was that at that time silver was surplus to U.S. needs while copper was in short supply.

Dealing with this last point first, as of December 31, 1941, the U.S. Treasury held 3,346,600,000 ounces of silver—accumulated as a result of the Silver Purchase Act of 1934. This is more than twenty times the amount of silver now held by the defense stockpile.

Thanks to the existence of these large Treasury holdings, during the war 900,000,000 ounces of silver was furnished to government defense plants as a substitute for copper; 411,000,000 ounces was furnished to U.S. Allies on a lend-lease basis to mint silver coins used to bolster civilian confidence in currencies at a time of war fears and inflation; and 135,000,000 ounces was sold under the Green Act for War Production Board allocations to industry. In addition then current production from mines in the United States, Canada, Mexico and elsewhere was required to satisfy silver demand.

FEMA believes that silver will not be needed as a substitute for copper in a future emergency. What assurance is there that in an emergency copper will not again be in short supply? The copper stockpile contains only 29,000 tons against an objective of 1,000,000 tons. A major domestic processing facility in Montana has closed and domestic mine production is now being exported in large amounts for processing in Japan. The country will have to scramble to meet defense copper demands and may well desire to substitute silver for copper once again.

Despite an increase in Canadian silver production in recent years, aggregate North American mine production of silver in 1980 was substantially less than in 1941—122,000,000 ounces in 1980 against 173,000,000 ounces in 1941. This is the aggregate of U.S., Canadian and Mexican mine production of silver. While Canada and Mexico are good neighbors, no automatic assumption can be made that silver output from these countries will be entirely available to the United States. The country has learned that it cannot make such an assumption with respect to oil. (See page 8, Mine Production of Silver.)

None of the silver uses that proved so important in World War II has been eliminated. New uses have emerged—notably the expanded requirements for silver in storage batteries, an application which has been featured in space vehicles.

MINE PRODUCTION OF SILVER

[In thousands of ounces]

	1938	1939	1940	1941
United States	71,689	63,872	68,287	71,076
Canada	22,219	23,163	23,834	21,755
Mexico	81,019	75,871	82,640	78,364
Newfoundland [1]	1,664	1,421	1,494	1,657
Total	176,591	164,327	176,255	172,852
	1977	1978	1979	1980 [2]
United States	38,166	39,385	38,055	32,000
Canada	42,236	40,733	38,068	40,000
Mexico	47,030	50,779	49,310	50,000
Total	127,432	130,897	125,533	122,000

Source: U.S. Bureau of Mines.

[1] In 1938–44 Newfoundland was not part of Canada.
[2] Estimate.

A civilian cannot pose as a military expert. Any future defense emergency may differ materially from World War II. Yet as one examines the stockpile objectives for other materials, one cannot help but feel that silver has been looked at in a different perspective precisely because it is so readily salable and because its price is high by historic standards.

To cite an example—consider zinc. The zinc objective prior to 1963 had been as high as 1,500,000 tons. Then it was reduced to zero and most of the holdings of zinc (which had reached 1,580,000 tons) were sold. Later the stockpile managers had second thoughts. Today the objective for zinc is 1,425,000 tons but the stockpile contains only 376,000 tons.

Now the curious thing about zinc is that, like silver, most U.S. zinc imports come from Canada and Mexico. Why, if the proximity of these two sources for silver, gives assurance that no stockpile of silver is needed, does the government feel that it must have all that zinc? The largest direct military use of zinc used to be in shell and cartridge cases, but in many instances these have been replaced by steel.

It bears emphasizing that, with the exception of coinage, every military use of silver during World War II is still an important use today—photography, brazing alloys, bearings, electrical contacts, water purification—and in addition there is the new and growing use of silver-zinc and silver-nickel batteries. These batteries are an essential component of the space program, as well as having many other vital applications.

It is hard to escape the conclusion that the decision to reduce the silver objective is the consequence of the fact that silver is readily salable. A huge sum could be realized from disposing of the 139,500,000 ounces now held.

Note that the present stockpile is less than 5 percent of the Treasury silver holdings when this nation entered World War II. Despite that huge holding, despite the higher rate of silver production in North America then than now, grave problems arose in ensuring adequate supplies of silver to war industries during World War II. The annual Yearbooks of the U.S. Bureau of Mines for the years 1941–1945 and the Annual Reviews of the silver market, published by Handy & Harman during those years, contain the details of those difficulties. It seems improbable that those who made the decision to eliminate a silver stockpile took the trouble to review what happened with silver in World War II.

Mr. Chairman, I believe the decision to reduce the stockpile goal for silver to zero is not in the public interest. This Committee has done me the honor on my previous occasions of appearing before it to discuss stockpile issues. I have been involved with these matters since my government service during World War II. In my judgment to liquidate the silver stockpile would be an opportunistic move that would later be recognized as a grave mistake.

Thank you for giving me this opportunity to appear.

Dr. STRAUSS. Mr. Chairman, I am going to talk about both Senator McClure's bill, S. 1338, and also the bill, S. 906 regarding the disposal of materials from the stockpile.

Since its inception the stockpile program has been based on goals, sometimes also called targets or objectives which were established not by the Congress but by the administrative agencies. Congress simply authorized the program but the details have been in the hands of the administrative agencies. The intent has been to establish goals that would insure an adequate supply of strategic and critical materials essential to the Nation's security in times of military emergency.

Understandably, concepts of security change from time to time. Political events alter the perceptions of the security of sources of materials on which this country is import dependent. For example we now talk about Mexico and Canada as being adjacent to us and reliable sources. I recall very well that in the 1940's and 1950's Cuba was considered such a country. And the supply of nickel from Cuba was one of the factors that was taken into consideration in establishing the nickel stockpile objective.

I simply point that out because we cannot be sure outside our own 50 States what the policies and procedures of other governments will be. I think this is a very important factor to be considered in the whole stockpile program.

Now ideas with respect to the length or nature of military conflicts change. The law specifies that the stockpile is to be used for defense purposes and to meet national emergencies. Budgetary considerations or other economic factors such as the fight on inflation are not supposed to influence the establishment of stockpile goals.

However as Senator McClure said, we have had frequent changes and extremely volatile changes. This erratic history has imposed not only the heavy cost on the taxpayer which the Senator mentioned, it creates great problems for industry producers and consumers alike. The efforts are made to buy or sell materials without disrupting the market. That is one of the injunctions of the Stockpile Act.

But it is simply a fact of economic life that every purchase and every sale has a market effect. There is no such thing as insulating the stockpile transaction from the market as a whole. If we think that the stockpile can buy or sell without affecting the market, we do not understand the market. The market is affected by what the stockpile does.

Senator HUMPHREY. Do you mind if I interrupt you on that point? Some assert that the market has already discounted this impending sale. That is a valid assertion. You see that in other commodity markets. Could that not be the case here?

Dr. STRAUSS. Yes, certainly. In the case of silver, ever since the administration introduced the thought that it might liquidate the silver stockpile, the futures market—and there is a very active one in silver—has taken that into account. That is disruption.

All I am saying is that while the law says you must not disrupt, the fact is that whatever you do does affect the market. When and how the market is affected depends on when information becomes available. People do not wait until the event. They act on what they perceive as the likely consequences of the event when it occurs.

Senator HUMPHREY. That is certainly a valid economic truth and, to get on another subject, that is the basis of the President's desire to have a 3-year tax cut, people will act on the basis of their expectations. But that is another subject.

Dr. STRAUSS. Right, sir.

I am presenting here a brief summary of six specific metals, the stockpile history with respect to six specific metals which are not isolated examples but which are very dramatic. In the case of five of these materials, copper, aluminum, nickel, lead and zinc, they happen to be in tonnage the largest nonferrous metals industries. These are the five dominant nonferrous metals industries: copper, aluminum, nickel, lead and zinc.

In the case of all five, at one time or another the stockpile objective has been set at zero after having had an earlier stockpile. As Senator McClure indicated, we had accumulated very large amounts of these materials during the 1940's and 1950's. Beginning in the middle 1960's we liquidated all of our copper, nickel and aluminum holdings. We sold every last ton that was in the stockpile. We sold most of the zinc and about half of the lead.

Then suddenly we start recognizing that maybe we are not going to have a nuclear war, we are going to have a long war of considerable duration, and now we have objectives put back in place. And it is that particular point of course which Senator McClure brought out with respect to silver. We have a zero stockpile objective now. But we had a zero stockpile objective for copper, aluminum, nickel, lead and zinc. And now we have large objectives. What guarantee do the administrative agencies have that they will not change their minds?

And because of this history which now extends over a period of 35 years, since 1946 when the Congress enacted the act, because of this history the American Mining Congress strongly supports the concept of the McClure bill which would provide for a base formula based on import dependence. That would put the administrative agencies on notice that they have to explain in detail, which they have never done, why they do not perceive that that base is the correct one.

I am not going to read all of these figures to you. They are here. I think as the Senator has said, the particularly interesting situation is the one with respect to cobalt. By comparison with the five metals I have already mentioned, cobalt is a relatively small industry. But there are 450 pounds of cobalt in every jet engine.

Senator HUMPHREY. Excuse me again for interrupting.

It was claimed in testimony this week that there were 1,000 pounds in every engine.

Dr. STRAUSS. I think that was for a particular engine connected with one of the new fighter aircraft. The 450-pound figure is the average for all jet engines.

Senator HUMPHREY. Including civilian engines?

Dr. STRAUSS. Yes.

Senator HUMPHREY. So for military aircraft it is much higher since they have to withstand greater stress and temperature.

Dr. STRAUSS. Right. The point is there is not that much cobalt in the finished engine but you have to have that much on hand for the fabrication and manufacture of the jet engine.

Cobalt has a lot of other very important applications. For example it is mixed with tungsten in the production of tungsten carbide which is essential let's say to the energy industry. The drill bits with which

we put down oil wells contain cobalt. So here is a commodity that we know we have to have in an emergency.

We also know that between 80 and 90 percent of the world's supply of cobalt comes from two countries in Central Africa, Zaire and Zambia, newly independent, relatively unstable, and in the case of Zaire with a history of military coups and uprisings and shutdowns of mines. In spite of that fact that cobalt is obviously something that we ought to have and that we should have retained a stockpile, we did sell 60 million pounds of cobalt as Senator McClure has testified. Now we desperately want to buy it back and we are going to pay a much higher price for our purchases than we realized on our sales.

This is a clear illustration of instability of the stockpile program as run by the administrative agencies. And it is for this reason that we in the mining industry feel that some kind of stability has to be built into this program or it is going to cost the taxpayers dearly in money and it may leave us in a vulnerable position in the event of a military emergency.

Senator HUMPHREY. You mentioned the countries of Zaire and Zambia. As many of us know, we are critically dependent for many resources on southern Africa. As an official of an organization which has members who are involved in overseas operations, you are aware of I assume, the foreign markets and operation of foreign mining companies. I am sure you are familiar also with the statement of Mr. Brezhnev in Prague a couple of years ago in which he explicitly stated that the Soviet Union was going after cornering the market on strategic materials, as well as oil.

Do you see from your point of view an effective and successful Soviet policy? Are they making good on that assertion?

Dr. STRAUSS. Senator, 2 years ago at the annual meeting of the American Mining Congress in Los Angeles I gave a talk contrasting the position of the Soviet Union and the United States in strategic materials. In that talk I pointed out that through an accident of geology and geography there are a number of important materials where the total world supply is largely concentrated, not completely, but largely concentrated either in the Republic of South Africa or the Soviet Union.

And I pointed then and I would point again to the fact that it is no accident in my view that you have a Marxist regime in Angola and a Marxist regime in Mozambique, the two countries that lie to the east and west of the Republic of South Africa. If as a result of the disturbed political situation, and I am not defending apartheid or making any comment with regard to the human rights issue but simply looking at it realistically——

Senator HUMPHREY. Let's expand it from South Africa, the country, to southern Africa.

Dr. STRAUSS. All right, southern Africa including Zimbabwe, Zaire, Zambia.

If as a result of political upheaval in South Africa you should have a left-leaning government installed in power in South Africa, you would then have the capacity with respect to certain materials of having an effective cartel that would make OPEC look like child's play. Those

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materials are specifically chrome, manganese, the platinum metals, and if this area of influence included Zaire and Zambia then you would have to add cobalt to the list because the bulk of the world's supply comes from there.

I have seen some statements pointing out that 75 percent of our cobalt imports comes from Zaire and Zambia. That is an understatement because most of the balance of 25 percent comes from Belgium. And the Belgian imports are simply material from Zaire that has been processed in Belgium and then shipped to the United States.

Senator HUMPHREY. All of what you say is uncontestable, it seems to me. But my question is do you see the Soviets succeeding in their stated goals of cornering the market on these strategic minerals?

Dr. STRAUSS. Not unless there is a leftwing government brought into power in South Africa.

To be perfectly candid I have to point out that with regard to another commodity which is less strategic but which is nevertheless very much valued by half of the world's population; namely, diamonds, there is such a thing as an international diamond cartel run primarily by the dominant South African producers. I have observed that the Russians appeared to marl et their diamonds in concert with what the South African group does.

So even though there is a very grave ideological conflict between those two countries, it does appear that at times there is a commercial collaboration, shall we say. I cannot go beyond that.

Senator HUMPHREY. Thank you. I am sorry to interrupt you.

Dr. STRAUSS. That is quite all right. I welcome the interruptions. Please feel free at any time to stop me.

So I want to support what Senator McClure says. The formula suggested in his bill will not precisely fit every commodity at all times. I observed that when the administration witnesses appeared before you earlier this week, they made the point that for example copper consumption had increased very rapidly during World War II and the Korean war and our involvement in Vietnam.

The comparison has to be looked at in the light of the fact that prior to World War II we had a very serious depression. There was a minor recession in 1949 immediately preceding the Korean war. And so part of the increase was simply the fact that business had been at a very poor level and not as a result of what I would call a higher rate of military demand than civilian demand.

The fact is that for the bulk commodities, aluminum, copper and so forth, the limitations are going to be the limitations of manpower and fabricating capacity. And this country, while it may use a lot of copper or aluminum or lead or zinc for military purposes, will find that it cannot at the same time also maintain a high rate of activity in civilian requirements. During World War II the automobile production was suspended, residential construction was sharply cut back.

What I am saying is that the quantity of metal in the big tonnage materials that can be handled in wartime may be very well limited by constraints of fabricating capacity rather than by availability of material. When you come to the specialized products—and cobalt is a good example—there is difference.

It is for that reason that I feel that the formula the McClure bill will not fit the situation every time. But the bill does make allowance

for those contingencies as Senator McClure indicated by allowing the administrative agencies to come before the Congress and say well, now under the McClure formula we would have a stockpile goal of x million pounds of let's say quartz crystals and our military requirements for quartz crystals are fivefold what they are in peacetime, therefore we need a much larger stockpile.

Such an explanation should be offered to the Congress. It never has been. When the stockpile goal for copper, which the FEMA people now say is so desperately needed in wartime, was reduced to zero, the Congress was told only that it was unlikely that a war would last more than a year and that if it should last more than a year, either mine production could be expanded or substitutes could be found.

That is not the reality of the marketplace. You cannot expand mine production of copper in a year. It takes anywhere from 3 to 10 years to expand mine production. It is not possible to substitute other materials because you have to redesign, retool, put in new kinds of fabricating facilities. The fact is that the McClure bill recognizes the desirability of having a 3-year protection. Sure, we may have a war that will last only 6 weeks, but nobody knows that. And if we really want protection against the contingency of a long, enduring struggle such as we have been through many times, then we need more than a 1-year stockpile.

Turning now to S. 906, the bill that authorizes the acquisition and disposal of materials, I want to comment on the proposed 139.5 million ounces disposal of silver. Of the seven materials the bill seeks authority to sell, silver is the only one for which the stockpile objective is now zero. It is clear that one of the motives for reducing the silver stockpile to zero is the fact that it is not hard to sell silver.

Now FEMA, in dealing with the silver issue, has stated that United States and Canadian production is sufficient to cover all defense wartime needs and that United States, Canadian, and Mexican imports could supply 120 percent of U.S. wartime needs. It also went on to say that during World War II a large part of the silver use was as a substitute for copper.

Dealing with that last point first, 900 million ounces of silver was used as a substitute for copper in World War II because copper was short. Does FEMA know that copper will not be short in the next emergency? FEMA now says they need 1 million tons. They have 30,000 tons on hand today. How do we know that we will not run into a situation where we will need the silver as a substitute for copper in a future emergency? There is no assurance.

But dealing particularly with this question about Mexico and Canada, because the great emphasis has been laid on that, I would like to make some points. First of all, the combined production of silver in the three North American countries, the United States, Canada, and Mexico, was 173 million ounces in 1941, the year before we entered World War II. It was 122 million ounces in 1980. So the volume of silver production in North America today is substantially less than it was when we entered the Second World War.

Second, how do we know that all of the Canadian and Mexican production is going to be available to us? I have here a little book which is a reprint of the Annual Reviews of the Silver Market put out by Handy & Harman, a leading consumer of silver and therefore not oriented from the producer's point of view.

It is rather significant that during World War II Mexico consumed over 20 million ounces a year in coinage. Why did they do that? They did it because with a world war going on, confidence in paper money in Mexico was shaken. How do we know that if we have another war, Mexico will be glad to turn their silver over to us for our wartime purposes and will not try to shore up its own internal economy by issuing more silver coinage?

Senator HUMPHREY. By the same token, I noted in statistics I saw the other day that a large measure of our drawdown of strategic silver supplies during World War II, went to help our allies make their currency sounder and to relieve public anxiety.

Dr. STRAUSS. Right. The largest part of the lend-lease silver, and that was over 400 million ounces, was loaned to the United Kingdom and to India. Why? Because the population of India was well aware of the fact that when the Japanese overran Burma, Thailand, and Malaya, they repudiated the validity to British currency and the natives were in a panic. In India the people did not want British paper money. They wanted something with intrinsic value. Those conditions are very likely to occur again in any future military emergency.

Now none of the silver uses that proved important in World War II have been eliminated, not one. If you read through this book you will find that the wartime consumption of silver in the United States increased to fivefold what it was the year before the war broke out and that 65 percent of all of that consumption was directly war related.

What are these uses? Well, the most important one during World War II was in photographic film. But equally important was brazing alloys. You cannot put tanks, airplanes, military equipment of any kind together without the use of brazing alloys. And silver is preferable to ordinary lead-tin solders because of its temperature resistant qualifications.

Another major use of silver is in the electrical field as contact points. There are substitutes available but they will not perform as well. A new use for silver which has developed since World War II is the development of silver-zinc and silver-nickel batteries. Our space exploration program and in particular the landing craft used on the surface of the Moon were all powered with silver-zinc batteries. This is a growing field and one in which the military applications will be very large.

As Senator McClure so well stated, it is difficult to understand how you can downrate the strategic uses of silver. Now Mr. Krueger I believe testified that he calculated the total availability of silver during a 3-year war at 700 million ounces. I do not know the breakdown of his figures, but I have to assume that he took into account domestic production, Canadian and Mexican production plus scrap plus the stocks in the hands of the commodity exchanges which amount to something over 100 million ounces.

A lot of people think that that stuff is readily available. Sure, but it is private property. What price will the Government have to pay to take that away from its citizens? That is a good question. I have not seen any answers to it.

He estimated the consumption of silver in a 3-year war at 500 million ounces. If experience during World War II is any criteria with

the fivefold expansion of silver consumption that occurred during World War II, I doubt that that would be an accurate figure because that is an average of 160 million ounces a year which is about what we have been using recently in peacetime.

The reason that I am particularly concerned about the zero stockpile objective for silver is this heavy reliance on the thought that we have available to us the silver production of our neighboring countries. This criteria does not seem to apply for example to the establishment of other stockpile objectives. I point out in particular that with regard to zinc where we have a very large objective by FEMA, 1.4 million tons, our principal import sources are also Canada and Mexico. If Canada and Mexico's availability is such an assurance with respect to silver, why is it not an assurance with respect to zinc? This is a question I think that FEMA ought to be asked to answer.

Furthermore, the largest single use of zinc during World War II was in connection with ammunition: shell casings and cartridge casings. Brass was used. To a considerable extent that use has now been replaced by steel. We are not trying to downgrade zinc. I am simply saying that I cannot escape the feeling that in regard to silver, simply because it is such an easily liquidated commodity, the budgetary considerations have weighed very heavily on the decision to establish a zero stockpile objective.

Mr. Chairman, I have gone on a great length on this issue. I believe the decision to reduce the stockpile goals for silver to zero is not in the public interest. This committee has allowed me to appear on many previous occasions to discuss stockpile issues over the last 35 years. I have been involved in these matters ever since World War II.

I believe that liquidation of the silver stockpile now because of budgetary considerations would be an opportunistic move and it would be later recognized as a grave mistake.

Thank you.

Senator HUMPHREY. Thank you, Dr. Strauss, for your very excellent testimony and for your time. Does that closing statement apply to total sales of our silver stock or just to the proposed sale?

Dr. STRAUSS. I would say that if the Congress were prepared to adopt the McClure formula as a measuring stick against which all stockpile goals should be considered, then we would not ask that any kind of exception be made for silver. As Senator McClure pointed out, under his formula there would be a quantity of silver available for sale—under that formula.

But I believe that that formula should be applied across the board because the company that I work for and the industry that I represent is also terribly interested in copper, lead, zinc and so forth, and we do stockpile goals to zero stockpile goals and back up again. It has been extremely disruptive to our industry.

Senator HUMPHREY. To say the least, I am sure. It has been extremely disruptive to the pockets of the taxpayers too, I would say on a historical basis.

So in other words, you are willing to trade off about 58 million ounces of silver to have some stability in this operation once and for all.

Dr. STRAUSS. That is right.

Senator HUMPHREY. I have a few more questions, I want to get on the record. To some degree you have already answered them.

The administration says that its wartime requirements for silver would be 517 million troy ounces for a 3-year period. Do you dispute that number?

Dr. STRAUSS. I have no way of disputing it because a lot of that is classified information. To me it appears unlikely as I say simply because in past situations, and notably in World War II, demand increased so very rapidly over the peacetime use. The 517 million ounces is approximately the volume of silver consumption in a normal 3-year period currently.

Senator HUMPHREY. Peacetime, you mean.

Dr. STRAUSS. Yes.

Senator HUMPHREY. The administration says further that—perhaps I should be using the word FEMA. FEMA says that it has assured supplies of silver in the same 3-year period of 620 million troy ounces: 370 million from the United States, 140 million from Canada, 110 million from Mexico.

Dr. STRAUSS. I would question those figures, particularly the figures for Canada and Mexico. As my testimony pointed out there is no assurance that Mexico will sell silver to us if they have some other use for the silver. I believe it is extremely probable in the event of a world war that Mexico will increase its use of silver for coinage to protect its own currency and that therefore the amount of silver that is available from Mexico would be reduced.

What was the figure for Canada, 120 million ounces?

Senator HUMPHREY. It is 140 million ounces.

Dr. STRAUSS. That is an unrealistic figure, sir, because the present rate of total Canadian production is about 40 million ounces a year. The largest single source of silver in Canada is a mine in Ontario. As it goes deeper the silver content is dropping and the copper content is rising. So their silver production is on the downgrade. Total production of silver from Canada is not likely to be as high as 140 million ounces in the 3-year period.

Apart from that, Canada has an important silver consuming industry of its own. Even if they were well disposed toward us, they would have to consider their own industry and they might also feel constrained to supply silver to the British. The British have no silver production of their own. I think it is very unrealistic to count on these supplies from our two neighbors in those amounts.

Senator HUMPHREY. Under the Stockpiling Act, FEMA apparently is supposed to take into consideration industry opinion. Was your opinion solicited in putting together these figures?

Dr. STRAUSS. Certainly not with regard to the zero stockpile objective. It was not solicited but they have heard it.

Senator HUMPHREY. Let's go to chrome. As you know, we do not have a goal in chrome. What are your views on stockpiling chrome?

Dr. STRAUSS. There is a goal on chrome, sir. I think it is not in Mr. McClure's tabulation but there is a goal. The present chrome stockpile is I believe 87 percent of the present objective if you take the number of units of chrome contained in the various categories of ore and ferrochrome and so forth.

However there is a disproportionate share of the chrome that is in a product. I believe it is high carbon ferrochrome. Mr. Watson of the ferroalloys organization is in the room and perhaps he can correct me

if I am wrong. There is a disproportionate quantity stockpiled of a quality of ferrochrome that we do not want and a considerable deficiency in the quality that we do want. Unfortunately I do not have the stockpile objective figures right in front of me.

This country has chrome deposits. They happen to be very low grade and very high cost. During World War II, faced with the situation we were faced with, the Government spent a great deal of money to build some plants in Montana to treat that material. A relatively small tonnage of chrome was produced. It was a very poor quality of material. It never was used by industry. It went into the stockpile and I believe still languishes there. It is not readily salable.

Senator HUMPHREY. Do we stockpile chrome ore?

Dr. STRAUSS. We stockpile both chrome ore and ferrochrome which is the next step up. Ferrochrome is the product that the steel industry uses to make stainless steel and other steel alloys.

Senator HUMPHREY. Should we be stockpiling both? Is there a better way to approach it?

Dr. STRAUSS. We face a conundrum. From a money standpoint it is a lot cheaper to stockpile the ore than to stockpile the ferrochrome because you are tying up money in the cost of converting.

On the other hand due in part to regulatory factors, the capacity to produce ferrochrome in this country has been very substantially reduced in recent years. A number of plants have shut down. So if we have a large stockpile of chrome ore it does not do us very much good if we lack the capacity to convert it. These factors have to be taken into account in the stockpile mix.

I think one of the factors that Congressman Santini has included in his bill on the House side is the thought that there ought to be really more interplay between the Government agencies with regard to the composition of the stockpile and industry. I am not saying that industry should make the decisions. Obviously those should be made by Government people.

But in the past the administrative agencies have made some very peculiar decisions. The most peculiar was one with respect to the stockpiling of alumina which is the intermediate product between bauxite and aluminum metal. No opinion was sought from industry. They had a stockpile goal at one time of about 12 million tons of alumina. This is a very fine material, has to be stockpiled indoors. It would be necessary to construct enormous storage facilities to handle it. No one knows the aging characteristics of alumina. But as I say, industry opinion was not even sought.

Now they backed away from that and the present objectives do not show an objective for alumina. They have replaced that with an objective for aluminum metal and an increased objective for bauxite which makes sense from an industry point of view. The argument for stockpiling aluminum is you have it in usable form in an emergency. You also have a stockpile of energy. Every pound of aluminum represents 7½ or 8 kilowatt-hours per pound.

But as against that you are tying up a lot more money. It costs you over $1,500 a ton for aluminum as compared to $30 a ton for bauxite.

Senator HUMPHREY. That is an interesting area. You touched upon that earlier. In wartime presumably we would want to have

these materials in the most rapidly usable form, ingots I suppose in most cases, refined, in other words.

Dr. STRAUSS. I think what is needed you see is collaboration between industry and Government so that the Government people take into account the existing capacity. Right now our manganese stockpile is largely in manganese ore and 60 percent of our capacity to make ferromanganese out of that ore has been shut down. So while it looks as if we have the manganese we need, we do not have it in the form that we can readily make available.

Senator HUMPHREY. Of course the difficulty is money.

What about innovative approaches in this area? Would the user industries be willing, do you suppose, to contribute to refining these materials in return for a guarantee of a supply? Has that ever been discussed?

Dr. STRAUSS. Yes. These concepts have been considered. I think what acts against it now is the high interest cost, quite frankly. If you are tying up your processing, if you are not going to get reimbursed for the cost of processing let's say manganese ore into ferromanganese until you actually have the need for ferromanganese, you have money tied up in there in that 20 percent. That is a great burden for private industry to carry.

During the Second World War and also during the Korean war this problem was in part met by the Government building plants and having them operated by private industry but at Government expense through the Defense Plant Corporation.

Senator HUMPHREY. The Stockpiling Act permits the executive to set up advisory committees composed of individuals with expertise. Have such committees ever been set up?

Dr. STRAUSS. They were in effect following the original act of 1946 up to and through the Korean war. They have not been active since the Korean war and most of the members of those committees with the possible exception of myself are now 6 feet under.

Senator HUMPHREY. I want to assure our next witness, Mr. Weeks who is patiently waiting—or perhaps impatiently waiting at this point, that we have not forgotten him. But this is so interesting that I want to pursue it a little more.

Dr. Strauss, what is your position on the proposal to underwrite title III, of the Defense Production Act to spur domestic industry?

Dr. STRAUSS. My position on that is strongly in favor of it. In an effort to create a vehicle through which it will be possible to stimulate the production of some of those materials—this would not apply to silver or copper or even aluminum in the present state—but there are some of these materials which we mentioned earlier upon which we are heavily dependent for supplies from southern Africa where there is some potential for domestic production, notably platinum and cobalt.

The problem is that the people who are doing the exploration work on these projects right now are very well aware of their extremely volatile markets. If title III of the Defense Production Act were not only continued in effect but continued in effect for a period of time, it might be possible for the Government to make long-term contracts with the floor price which would encourage people to make the necessary investment.

The difficulty is that in the face of very volatile prices, private capital hesitates to make this investment. Now if it is in the Government interest to buy insurance and one of the factors is that if you do not have domestic production, you have to have a larger stockpile whether it is under the McClure formula or even as the administration has been calculating. If you could have let's say 5 to 7 million pounds a year of domestic cobalt production or 200,000 ounces a year of domestic platinum production, you could lower the stockpile objective. You would have to tie up less money in the stockpile.

Now the floor price guarantee in the past has proven an exceptionally effective way of stimulating domestic production. When the nuclear age started right after World War II, the general opinion was that the United States had no uranium resources worth mentioning. The feeling was that we would be dependent on what was then the Belgian Congo, South Africa, and Canada for our supplies of uranium.

But from a political point of view it was felt desirable to make some gesture toward the domestic mining people. In 1950 or 1951, I do not remember precisely when, the Atomic Energy Commission issued a statement guaranteeing a floor price for uranium of $10 a pound of U^{308} for the following 10 years. Virtually every inhabitant of Denver, Salt Lake City, Phoenix, et cetera, bought himself a Geiger counter and went into the hills, and the success was far beyond the wildest dreams of the experts of the Geological Survey of the U.S. Bureau of Mines. As a result we created a domestic uranium industry.

What I am saying is that a similar device under title III of the Defense Production Act restricted to chrome, manganese and platinum or cobalt, or other commodities where we have no domestic mining industry now, might bring about some domestic production. I have to be frank and tell you that with regard to manganese and chrome, the deposits that have been identified so far are not likely to be viable at any kind of a reasonable price. But for cobalt and platinum it is different.

Senator HUMPHREY. In real terms, how have the prices of these various strategic metals changed over the last decade?

Dr. STRAUSS. The price of platinum was considerably higher than the price of gold, but it was in the range as I recall of $150 to $200 an ounce.

Senator HUMPHREY. What I am getting at here is the incentive to produce these various materials domestically. Is the incentive less than it was 10 years ago or the same?

Dr. STRAUSS. The incentive is roughly the same, but the problem that is in the minds of the private enterprises that are looking at these things is that they see the possibility that the present price may not hold. Cobalt is a particularly clear example of that. It went from $6.25 or $6.50 a pound just prior to the invasion of Zaire by the dissidents up to $40 a pound when the mining centers in Zaire were taken over very briefly.

The price has since dropped back to $20 a pound as far as the producers are concerned, but the outside market is down to $15 or $16 a pound. Is it going to go back down to $6.50? There is nobody who can really guarantee this. When you consider that the ventures that are now under consideration, cobalt in Idaho and Missouri

and platinum in Montana, will take 3 or 4 years to come into production, you can see the kind of questions that the bankers will ask the companies before they make any loans.

Senator HUMPHREY. So in other words, the money is flowing into more stable investments.

Dr. STRAUSS. Right.

Senator HUMPHREY. Let me ask that the American Mining Congress provide some answers for the record, if you will. Can you do that for us?

Dr. STRAUSS. Yes, sir.

Senator HUMPHREY. I would like for you to make some suggestions on the possible changes to laws affecting mining, taxes, the whole spectrum that might encourage greater domestic production in the area of strategic and critical materials.

Dr. STRAUSS. I do not know if you are familiar with the resolution of the American Mining Congress.

Senator HUMPHREY. No; I am not.

Dr. STRAUSS. We will start by providing you a copy of the resolutions which were adopted at the last annual meeting in San Francisco last fall and we will try to update that in terms of some of the specific issues that are facing the Congress today.

Senator HUMPHREY. Thank you.

There are a couple other matters I would like to cover.

Let me go back to Mr. Brezhnev's statement. I asked you do you see the Soviets succeeding in cornering the market. By that I did not mean do you think they will ultimately. What I meant was, do you see them making progress year by year, in gaining influence and possible control over the flow of these resources.

Dr. STRAUSS. I think they are making progress but it is not to a level which I would today consider threatening. If the viability of the four countries that we were talking about, Zaire, Zambia, Zimbabwe and South Africa, if they continue to be independent of Soviet policy the problem is under control. The real threat is if these countries become subject to Soviet policy.

Senator HUMPHREY. You are quite familiar with the mining situation in that region of Africa?

Dr. STRAUSS. Reasonably familiar; yes, sir.

Senator HUMPHREY. I have one last matter here that is of particular interest to me. It seems to me it is not considered sufficiently in discussion of silver sale.

It is the matter of convertible currency. There are many economists and others who think we ought someday to return to a convertible currency. Assuming that we wanted to, what would be the effect of the proposed silver sale? Does it bear heavily on the question?

Dr. STRAUSS. It would make it difficult to resume silver coinage because when the Government went into the market to acquire silver for coinage purposes—of course, just as the proposed sale as we discussed earlier has had an effect on the market, as soon as word gets around that the Government is coming back into the market, the price of silver is bound to react to that.

Incidentally, I understand that there is currently before Congress a proposal to mint some George Washington half dollars and possibly

some Olympic dollar coins which would use some of the silver, not the silver in the strategic stockpile but the small balance held in the Treasury.

Senator HUMPHREY. Would that silver be included for intrinsic reasons or just to make the proper alloy?

Dr. STRAUSS. No, because we have coins now without any silver in them and they circulate. No, it would be in there because the Treasury would be able to sell its silver at a substantial profit because the coins would be marketed at a great premium over face value. Therefore there would be what is know as seniorage.

I have written a little piece on this whole subject of silver and gold as money and I will be glad to leave a copy with you. It goes back to the 120 talents of gold that the Queen of Sheba gave to King Solomon which not many people realize was 6 tons of gold. She really liked the fellow, you know. [Laughter.]

Senator HUMPHREY. I have one more question.

At one time we had currency that could be converted either to gold or silver, at owner's choice I suppose. How much silver did it take in those days to back up the currency? I guess that you still do not get a handle on it because there is a lot more currency in circulation today.

Dr. STRAUSS. Yes, there is. This volume contains a lot of references to this. Under the Silver Purchase Act which was enacted in 1934, the Government at one time held over 3 billion ounces of silver. A good part of that was in circulating coins. I think the calculation was something like 700 million or 800 million ounces was out circulating around in public hands in the form of coins.

In addition there were silver certificates which were the convertible paper money backed by silver at $1.29 an ounce. And there was over $1 billion face value of those backed by a corresponding amount of silver. So there was probably about 2 billion ounces, if memory serves me right, that was tied up in one way or another in connection with currency. And there was about a billion ounces that was so-called free silver which was over and above the money needs, and it was from that silver that the lend-lease of silver to our allies was made.

Senator HUMPHREY. Is that not where the silver came from which is now being proposed to be sold?

Dr. STRAUSS. Yes, sir. The last active acquisition by the Government under the Silver Purchase Act was about 1958 or 1959.

Senator HUMPHREY. In other words the silver we are proposing to sell was not bought for strategic reasons. It was bought to back up currency.

Dr. STRAUSS. No. But you see when the Stockpile Act was passed in 1946 and the list of materials essential to defense were considered at that time with the Treasury holding 3 billion ounces because the lend-lease of silver was going to come back in one form or another, there was no need to have a strategic stockpile because the Treasury had all of it.

Senator HUMPHREY. I see.

Thank you very much, Dr. Strauss. It was very interesting, not to mention entertaining. Thank you, sir.

Dr. STRAUSS. Thank you, sir.

Senator HUMPHREY. Our next witness is Mr. Sinclair Weeks, Jr., president of Reed & Barton Corp. and vice president of the Silver Users Association.

Good morning, Mr. Weeks.

Mr. WEEKS. Good morning, Mr. Chairman.

Senator HUMPHREY. Will you introduce your associate for our benefit?

Mr. WEEKS. Yes, I will. I am accompanied this morning by Mr. Walter Frankland, Jr., who is the executive vice president of the Silver Users Association.

Under our democratic process I am very pleased to be here and give you an alternate point of view from those that you have heard this morning.

Senator HUMPHREY. Proceed, Mr. Weeks.

STATEMENT OF SINCLAIR WEEKS, JR., VICE PRESIDENT, SILVER USERS ASSOCIATION, ACCOMPANIED BY WALTER L. FRANKLAND, JR., EXECUTIVE VICE PRESIDENT, SILVER USERS ASSOCIATION

Mr. WEEKS. We are here in support of S. 906 which would authorize the release of 139.5 million ounces of silver from the national stockpile and provide funds for the purchase of items needed for the stockpile.

The Silver Users Association is composed of manufacturers which use silver in the production of photographic film, electrical appliances and contacts, silverware, fabricated industrial products, commemorative art, jewelry and medical supplies. It is estimated that members of the association consume approximately 80 percent of the silver used in domestic manufacture. A list of the membership is attached as enclosure A to this statement. A factsheet explaining in more detail the purpose of the association is at enclosure B.

[Inserts A and B follow:]

[Enclosure A]

SILVER USERS ASSOCIATION, INC.—SUA MEMBERS

PHOTOGRAPHIC MATERIALS

E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.; Eastman Kodak Co., Rochester, N.Y.; Minnesota Mining & Manufacturing Co., St. Paul, Minn.; Peerless Photo Products, Shoreham, N.Y.; Polaroid Corp., Cambridge, Mass.; Polychrome Corp., Clark, N.J.; Powers Chemco, Inc., Glen Cove, N.Y.; Rhone-Poulence Systems Co., Parsippany, N.J.

SILVERWARE

Gorham Division of Textron, Inc., Providence, R.I.; the Kirk-Stieff Co., Baltimore, Md.; Lunt Silversmiths, Greenfield, Mass.; Oneida Ltd., Oneida, N.Y.; Reed & Baron Silversmiths, Taunton, Mass.; Tiffany & Co., New York, N.Y.; Towle Manufacturing Co., Newburyport, Mass.; Wallace Silversmiths, Wallingford, Conn.

COMMEMORATIVE AND COLLECTOR ARTS

Medallic Art Co., Danbury, Conn.

FABRICATED AND INDUSTRIAL PRODUCTS

Engelhard Industries, Iselin, N.Y.; Handy & Harman, New York, N.Y.; J. W. Harris Co., Inc., Blue Ash, Ohio; Metz Metallurgical Corp., South Plainfield, N.J.; Midland Processing, Inc., Pomona, N.Y.; National Refining Corp., Gallatin,

Tenn.; Precision Metallurgical Corp., Millis, Mass.; Refinement International Co., Mapleville, R.I.; Ronel Refining Co., Inc., Hollywood, Fla.; Silfab Corp., Naugatuck, Conn.

ASSOCIATIONS

Manufacturing Jewelers, & Silversmiths of America, Inc.; National Association of Mirror Manufacturers.

ELECTRONICS

Ray-O-Vac Co., Madison, Wis.

[Enclosure B]

SILVER USERS ASSOCIATION, INC.

FACT SHEET: PURPOSE OF SUA, INC.

The Silver Users Association, Inc., established in 1947, represents the interests of corporations that make, distribute and sell products in which silver forms an essential part. Association membership today includes representatives from the photographic, electronic, chemical, commemorative arts, silverware and jewelry industries; producers of semi-fabricated and industrial products; and mirror manufacturers.

A major purpose of the Association is to keep its members and the public informed on the pertinent developments in the field of silver; such as, production, consumption, availability, uses, prices, regulations and legislation.

The applications of silver are highly diversified and range from photography to missiles; from computers to sterling jewelry. An approximate breakdown of the silver usage in the U.S. shows these percentages; photography, 39.2 percent; electrical and electronics, 25.2 percent; sterling ware, 9 percent; brazing alloys, 7 percent; electroplated ware, 5.6 percent; catalysts, 5.3 percent; jewelry, 3.6 percent; commemorative and collector arts, 1.6 percent; mirrors, 1.1 percent; and, all others, such as bearings, dental and medical supplies and rockets and missiles, 2.4 percent.

The Association estimates that its members account for approximately 80 percent of all silver consumed in the United States. More than 80,000 men and women work for Association members who are heavily dependent upon silver for manufacturing. In addition, there are about 1,500 firms of the Manufacturing Jewelers and Silversmiths of America and their 70–75,000 employees; and, the 22 members of the National Association of Mirror Manufacturers and their employees. The Association was incorporated in the District of Columbia in April, 1971.

President of the Silver Users Association is Mr. Robert F. Wilson, President, Wallace Silversmiths. Mr. Sinclair Weeks, Jr., President, Reed & Barton Silversmiths is Vice President, and Chairman of the Executive Committee. In addition to these two officers, other members of the latter committee are:

Nelson B. Colton, Engelhard Industries; Philip G. Deuchler, Handy & Harman; Treasurer, SUA; George R. Frankovich, Manufacturing Jewelers & Silversmiths of America, Inc.; Kamran Habibi, E. I. du Pont de Nemours & Co.; Denham C. Lunt, Jr., Lunt Silversmiths; R. C. Mack, Eastman Kodak Co.; Jay Powers, Powers Chemco; Richard Rosenblat, Polaroid Corp.; Donald Schwartz, Medallic Art Co.; James W. Thomas, Gorham Division of Textron, Inc.; Robert E. Wiele, Minnesota Mining & Manufacturing Co.; Walter L. Frankland, Jr., Executive Vice President-Secretary, SUA.

SUA SUPPORTS SILVER SURPLUS SALES

The Silver Users Association in its review of the history of the stockpile question notes that the need for emergency stocks for this metal were influenced by a large monetary need. That large requirement no longer exists. Therefore the zero goal appears logical.

What we do encourage, then, is that the amount of silver determined to be surplus to defense requirements be returned to the market from which it originally came. For more than 8 years, silver in varying amounts has been declared surplus by four different administrations including the current one.

The Strategic and Critical Materials Stock Piling Act specifically provides that commodities declared surplus are to be made available to the market "with due regard to the protection of the United States against avoidable loss * * * and the protection of producers, processors and consumers against avoidable disruption of their usual markets * * *." Congress has been exceptionally slow in performing its approval role in this procedure.

Mr. Chairman, we request that additional material be received for the record as relevant to the SUA position. I refer to an additional enclosure entitled "Background on Domestic Silver," and its attachments.

Senator HUMPHREY. We will be glad to include that in the record.

Mr. WEEKS. Thank you.

[The information follows:]

[Enclosure C]

BACKGROUND ON DOMESTIC SILVER

GENERAL

During its 200 year history, the U.S. Government has been the largest buyer user and seller of silver. Currently, it is probably the largest single holder of silver in the world with 139.5 million ounces in the strategic stockpile, 39 million ounces in the U.S. Mint and 4 million ounces held by the Defense Department.

DOMESTIC SUPPLIES

New Production in the U.S. for 1980 amounted to 30 million ounces (off 8 million ounces due to strikes).

Source: Bureau of Mines.

Secondary Recovery from scrap including melted coins is estimated at 90 million ounces for 1980.

Source: The Silver Institute.

Imports accounted for 76 million ounces during 1980. All but 15 milliom ounces of this figure is attributed to countries of the Western Hemisphere.

Sources: Handy & Harman, Bureau of Mines.

DOMESTIC CONSUMPTION

Industrial demand in the U.S. for 1980, estimated by the Bureau of Mines at 125 million ounces, was at the lowest level since 1964, dropping 20% from 1979. In addition to new production, scrap recovery and imports, other silver used to meet industrial requirements in recent years has come from industry inventories and speculative holdings. A breakdown by usage category is contained in Chart 3.

PRICE

At the time the Treasury ceased selling silver to all comers in May, 1967, the price was $1.29 per ounce. While the U.S. Government sold silver to domestic users at $1.29 a two-tier price system existed with the world price reaching $1.78. In July, 1967, the Treasury withdrew from the market and a month later sales were resumed as a weekly auction through November 10, 1970. Prices rose to a high of $2.565 by June, 1968, and then began dropping until a low of $1.288 was recorded in November of 1971. The average price in 1972 was $1.68; $2.57 in 1973; and $4.71 in 1974.

A new all-time high was established at $6.70 on February 20, 1974. The strong upward pressure on the price was caused by a world-wide distrust of currencies and a speculative investment craze. From August, 1975, until Jauary, 1976, the price of silver had been in a downward trend, with an average of $4.42 in 1975 and $4.35 in 1976. Fluctuations between $4.30 and $4.96 during 1977 were wide at times, with 5–10 cent differentials not unusual from one day to the next. The average for that year was $4.62. The average price for 1978 was $5.40.

During 1979, silver prices were very volatile with a low of $5.961 per ounce established on January 11 and a then record high of $28 on the last trading day of the year. In 1980, the record high of $48.00 was set on January 21 and a low of $10.80 recorded May 22. The average price through May, 1981, was $12.50.

GOVERNMENT STOCKPILE

Silver was first placed in the strategic stockpile in June, 1968, when 165 million ounces were transferred from the Treasury in accordance with the Silver Certificate Adjustment Act of 1967. By the Bank Holding Act of 1970, 25.5 million ounces were transferred to the Treasury for use in the Eisenhower coin program. The stockpile currently contains 139.5 million ounces.

The Silver Users Association, in establishing its position on the stockpile issue, does not attempt to determine what should be considered an appropriate level of silver to meet defense needs. Rather, the Association firmly supports the concept of an orderly disposal of whatever silver is determined to be surplus to defense requirements. The revenue gained therefrom could be put to good use in buying items critically needed for the defense stockpile.

In this regard, the Association wishes to point out that the United States, Canada and Mexico together produce about 115 million ounces annually. The balance of the Western Hemisphere supplies an additional 60 million ounces of new production making a total of about 175 million ounces. For an annual current demand of 125 million ounces in the U.S., it is evident that this raw material would be accessible in an emergency. The cited production does not include silver recovered in the U.S. annually from coins and other forms of usable scrap which in 1980 was estimated at some 90 million ounces.

The National Security Council has determined that there is no requirement for stockpiling silver. The amount currently in the stockpile—139.5 million ounces—is surplus to defense needs. It should be noted that other stocks in this country could become available for extreme emergencies not contemplated in the plans, such as:

39 million ounces in the Treasury stocks for coinage; 30 million ounces held by industry; 4.5 million ounces in Defense Department stocks for contracts with government furnished material provisions; 100-plus million ounces in COMEX and Chicago Board of Trade warehouses; an estimated 250–900 million ounces in 90 percent U.S. silver coins held by citizens; an undetermined amount of silver in ingots held as investments by citizens and institutions.

Charts: World Silver Consumption and Supplies (1973–80); World Silver Consumption (1973–80); U.S. Industrial Consumption (1973–80); Price History (1970–81) and Industry Stocks (1970–80).

CHART 1

1973–80 WORLD SILVER CONSUMPTION AND SUPPLIES[1]

[In million of ounces]

	1980	1979	1978	1977	1976	1975	1974	1973
Consumption:								
Industrial uses:								
United States	120	157	160	154	171	158	177	196
Other countries	220	263	283	280	266	219	247	282
Coinage uses:								
United States					1	3	1	1
Other countries	16	28	36	23	29	36	27	28
Total consumption	356	448	479	457	467	416	452	507
Supplies:								
New production	255	270	269	268	247	242	239	254
U.S. Treasury silver					1	3	1	1
Other supplies	224	145	164	163	218	192	166	190
Total supplies	479	413	433	431	466	437	406	445
Liquidation of (additions to) speculative inventories	(123)	35	46	26	1	(21)	46	62
Available for consumption	356	448	479	457	467	416	452	507

[1] Excluding Communist dominated areas.

Source: Handy & Harman Silver Reviews.

CHART 2

WORLD SILVER CONSUMPTION 1973–80

[In millions of ounces]

	1980	1979	1978	1977	1976	1975	174	1973
Industrial uses:								
United States	120	157	160	154	171	158	177	196
Japan	62	62	65	63	61	46	47	09
West Germany	29	37	47	60	51	39	60	65
Italy	25	33	42	34	32	29	39	42
France	20	22	22	21	19	21	16	14
United Kingdom	21	27	29	32	28	28	25	31
India	16	19	20	18	18	13	15	13
Other	47	63	58	52	57	43	32	48
Total industrial uses	340	420	443	434	437	377	411	478
Coinage:								
United States	0.1	0.1	0.1	0.4	1.3	2.7	1.0	0.9
Canada	.2	.3	.3	.3	8.4	10.4	8.6	1.4
France		7.7	11.1	6.9	6.7	5.2	3.6	.1
Austria	4.3	5.0	4.5	3.0	6.9	13.4	5.6	6.6
West Germany		3.7	3.6	2.6	2.9	4.3	8.8	9.5
Mexico	5.1	5.0	6.3	4.2				
Others	6.0	6.0	10.4	6.0	3.5	2.8	.1	10.7
Total coinage usage	15.7	27.8	36.3	23.4	29.7	38.8	27.7	29.2

Source: Handy & Harman.

CHART 3

U.S INDUSTRIAL CONSUMPTION, 1973–80

[In millions of ounces]

Category	1980	1979	1978	1977	1976	1975	1974	1973
Electroplated ware	4.4	8.1	7.3	6.8	9.5	8.7	13.2	14.5
Sterling ware	9.1	13.1	17.9	16.7	19.8	23.7	22.2	29.4
Jewelry	5.9	5.4	6.8	8.1	11.0	12.7	5.2	5.8
Photographic materials	49.8	66.0	64.3	53.7	55.5	46.1	49.6	52.0
Dental and medical supplies	2.2	2.3	2.0	2.2	1.9	1.5	2.4	3.0
Mirrors	.7	1.9	1.9	2.1	4.6	3.1	3.9	2.6
Brazing alloys and solders	9.0	10.9	11.0	12.4	11.2	13.6	14.5	17.7
Electrical and electronic products:								
Batteries	6.0	4.6	6.0	5.8	3.5	4.3	4.2	4.2
Contact and conductors	27.8	33.5	30.8	31.3	32.3	27.2	31.3	40.2
Bearings	.6	.3	.4	.5	.3	.5	.4	.4
Catalysts	3.0	5.6	8.2	8.9	12.3	8.8	7.3	6.0
Coins, medallions, and commemorative objects	4.7	4.7	2.7	4.2	8.2	7.2	22.3	20.1
Miscellaneous	2.0	1.0	1.0	.9	.4	.3	.5	.5
Total [1]	125.2	157.3	160.2	153.6	170.5	157.7	177.0	196.4

[1] Totals may vary due to rounding.

Source: Bureau of Mines.

CHART 4

SILVER PRICES, 1970–81

[Dollar amounts per ounce]

Year	High	Low	Average
1981 (Through May)	$16.45	$10.005	$12.50
1980	48.00	10.80	20.63
1979	28.00	5.96	11.09
1978	6.30	4.83	5.40
1977	4.96	4.30	4.62
1976	5.10	3.82	4.35
1975	5.23	3.91	4.42
1974	6.70	3.27	4.71
1973	3.28	1.96	2.56
1972	2.05	1.39	1.69
1971	1.75	1.29	1.55
1970	1.93	1.57	1.77

Source: Handy & Harman.

Silver in U.S. industry stocks	*(Ounces in millions)*
1980	30
1979	16
1978	29
1977	33
1976	30
1975	35
1974	60
1973	38
1972	52
1971	56
1970	82

Source: Bureau of Mines.

GAO REPORT CONFIRMS SILVER GOAL

Mr. WEEKS. At the request of the Senate Subcommittee on Military Construction and Stockpiles, the Comptroller General of the United States was asked to study national defense requirements for a silver stockpile. That report dated April 10, 1979, has been issued. It confirms that the methodology used by the Federal Preparedness Agency and its successor agency, the Federal Emergency Management Agency, FEMA, is a reasonable approach to this form of economic analysis and that current information indicates that the silver supply exceeds projected wartime requirements.

The report substantiates the position of the Federal Preparedness Agency that the stockpile goal for silver should remain at zero. The GAO analysis goes even further in stating that "defense tier requirements could be met by U.S. production alone."

Mr. Chairman, we submit that the report by GAO should help relieve the concerns of those who might question the zero stockpile goal for silver. We suggest that the GAO report should be made a part of these hearings.

MAJOR SILVER STOCKS ARE IN WESTERN HEMISPHERE

Unlike many other commodities in the stockpile, silver has its origin in and near this country as opposed to distant shores where availability might be troublescme in emergencies. It should be emphasized that the United States, Canada, and Mexico together produce about 110 million ounces annually. The balance of the Western Hemisphere produces an additional 57 million ounces of new production, making a total of about 167 million ounces.

For an annual current demand of about 125 million ounces in the United States—and these figures are about to be released by the Bureau of Mines this month—it is evident that this raw material would be accessible in an emergency. The cited production does not include silver recovered in the United States annually from coins and other forms of usable scrap which in 1980 was estimated unusually high at some 90 million ounces. The annual average amount of domestic silver from this source during the last 5 years has been about 70 million ounces.

SUA CALLS FOR SILVER AUCTIONS BY GSA

At a time when emphasis is being placed on strengthening defense, cutbacks in Government spending and lowering taxes, it is appropri-

ate for the Congress in our view to authorize the sale of surplus silver and permit the revenue to be used for purchasing items needed to bolster the defense stockpile.

The association therefore urges approval of legislation to release silver to the market as soon as possible. We advocate that the disposals be made in a manner comparable to the sales conducted by the GSA during the period 1967 to 1970. We suggest that weekly auctions be in amounts between 500,000 ounces and 1 million ounces.

The Congress should be reminded that at current silver prices, the value of the surplus silver is about $1.4 billion. The interest as a lost opportunity cost while carrying this surplus silver is more than $600,000 a day. It would seem that in these times of high inflation and expensive government, maintaining materials declared by the Government to be surplus to defense requirements is not in the best interest of the taxpayers while items are needed for the stockpile.

SUA RATIONALE FOR SALES

The rationale for the SUA position supporting legislation which calls for the release of surplus silver from the stockpile may therefore be summarized as follows: First, by National Security Council criteria, 139.5 million ounces of silver have been declared surplus to defense needs. Second, with the current market price for silver, the sale of Government silver would mean increased revenue for the purchase of high priority items critically needed for the defense stockpile.

Third, Government silver made available to the market would meet a portion of domestic requirements, thus lessening the need for imports. In the fourth instance, additional supplies to the market of of usable metal would be in the best interests of millions of Americans who consume products using silver; namely, photographic, electrical, medical, dental, and silverware requirements.

GOVERNMENT SALES WOULD IMPROVE BALANCE OF PAYMENTS

For many years prior to 1980 the United States had been a net importer of silver in amounts between 50 million and 75 million ounces. In 1980 due mainly to the highly speculative market that was silver, the United States was a net exporter of 2.2 million ounces.

Should supplies be made available from Government stocks, the need for imports would be reduced. At the current year-to-date average price of about $12-plus per ounce, the cost of silver net imports of 50 million ounces would be approximately $625 million. For every 10-cent increase in price the cost for silver imported at the 50 million ounce rate would be about an additional $5 million per year.

GOVERNMENT SILVER SALES WOULD MEAN FUNDS FOR STOCKPILE PURCHASES

At current prices the revenue to the Government would be about $9.99 an ounce which was the quoted price yesterday. With an average of $9.99 per ounce, the full stockpile release of 139.5 million ounces would realize a profit to the Government of about $1.2 billion.[1] The latter figure takes into consideration the $1.29 per ounce inventory assigned to stockpile silver.

[1] $1.2 billion is correct with the adjusted $9.99 figure for the price.

I will not read the materials that are in our report which have been referred to in previous testimony. But it does occur to me to be interesting that of the more than 90 commodities in the stockpile this commodity, silver, is the only commodity where there have been objections to the goals.

Since the last stockpile hearings the silver market has experienced very volatile market conditions. The price lately has been in the $10 to the $11.25 range. Difficult times have been experienced by many industrial silver users. However, if anything came across clearly from these transactions, it was that silver supplies will be adequate for many years to meet industrial needs including those associated with defense requirements.

ADDITIONAL SUPPLIES OF SILVER

It should be pointed out that besides the silver held in this stockpile, there are large amounts of above-ground metal in this country. In an extreme emergency not covered by defense plans, much of this silver would be available. These stocks include 39 million ounces in the Treasury stocks for coinage; 30 million ounces held by industry; 4.5 million ounces in Defense Department stocks for contracts with Government-furnished-material provisions; 100 million-plus ounces in Comex and Chicago Board of Trade warehouses; an estimated 250 to 900 million ounces in 90 percent U.S. silver coins held by citizens; and lastly, an undetermined amount of silver in ingots held as investments by citizens and institutions.

REDUCED M–X MISSILE REQUIREMENTS FOR SILVER

Before commenting on S. 1338, a bill which would base stockpile goals on import dependency, Mr. Chairman, perhaps one other reference should be made to the GAO report on silver. To correct information distributed by those interested in higher silver prices, the reference to the M–X missile program is quoted in part as follows: "System silver requirements are now estimated to be about 1 million troy ounces maximum."

SUA SUGGESTS CHANGES TO S. 1338

Because of the recent introduction of S. 1338, a complete analysis of this particular bill is yet to receive the attention of our membership. We can offer, however, some comments on the bill which would be an important departure from previous methods for determining emergency levels for commodities in the defense stockpile.

Due to the sensitivity of many of the wartime planning factors and assumptions, the Silver Users Association as one of the affected publics in this legislative area has not had the information necessary to critique past practices for setting stockpile goals. It still does not have that information and does not now criticize the methodology so developed. For that reason, in the past SUA has not advocated a particular level of the stockpile for silver. Its position consistently has been to support disposal of that portion of the stockpile deter-

mined surplus after the application of what can easily be understood to be a complex procedure.

With the development in 1977 of the import-dependency concept for determining stockpile objectives now embodied in S. 1338, the executive committee of SUA studied the earlier proposal. It found that when relying upon import dependency with no consideration of proximity and accessibility of the imports, stockpile levels appear distorted and unrealistic and very costly to the taxpayer.

Although silver is the commodity which has clearly demonstrated what one could label as a weakness in the concept, many other commodities are also available from the Western Hemisphere, especially Canada and Mexico. It has been said in the comments this morning that silver was used in the early 1940's. At that time, there was no substitute for silver in the coinage. As you know in the vote of the Congress in July of 1965, the copper-nickel alloy was substituted.

It can be argued perhaps that the responsibility for determining into which category a particular commodity is classified permits the interagency committee some flexibility in this regard. However, just such subjective judgment is of the type which the bill was designed to eliminate.

According to Senator McClure's statement, the formula he suggests would call for a stockpile level for silver at 81,520,000 ounces. This would leave a surplus of 57,980,000 ounces at this time. Periodically, however, this figure would be adjusted based on the 5-year moving average for net imports.

Calculated on net import figures available from the Bureau of Mines, the new formula would result in a requirement for silver of 100 million ounces, leaving a surplus of 39.5 million. This calculation includes the year, 1980, which actually showed a net export figure of 2 million ounces, quite different from the recent trend in imports. If that figure were excluded, strict adherence to the formula without considering sources of silver contiguous to our borders, the size of the stockpile would be about 125 million ounces, leaving 14.5 million as surplus.

Accordingly Mr. Chairman, should the subcommittee adopt this new procedure, SUA would suggest that members incorporate in the procedure for determining import-dependency a factor which acknowledges the accessibility of commodities largely available from the Western Hemisphere, especially Canada and Mexico.

Applying the amount of accessible commodities as an offset to the gross import deficit to determine the stockpile is a logical and acceptable procedure. Our association is ready to discuss further with committee members this suggested change to the proposal in S. 1338 and to assist in developing additional material for needed clarification.

In summary, Mr. Chairman, we believe the case for authorizing the disposal of silver surplus to defense needs as contained in S. 906 is clear-cut and in the Nation's interests. We urge early action on this important matter. The stockpile is short of critically needed commodities and the sales would provide the funds, not to balance the budget, but to purchase additional materials for the stockpile.

REPLIES TO EARLIER REMARKS BY SENATOR MCCLURE

Now I would like a moment to comment on Senator McClure's remark earlier that silver users have used the taxpayers badly.

In the first place I do not have to remind the chairman that Senator McClure represents a silver producing State and for many years, of course, has been associated with the producers from whom we buy.

The so-called Government silver which he is afraid will be disposed of was of course taken originally from the private sector. Also the record shows that the sale of silver in the period of 1967 to 1970 did not cause a fluctuation in the prices. In fact, in the first 9 months, prices went up during the sale and at the conclusion of the sale of silver 3 years later the prices were virtually the same.

I would like also to mention that the taxpayers who he feels we have abused are in fact the users of silver, and there are many more purchasers of film and batteries than there are producers. The high artificial prices of silver have caused more problems, I might add, than any problems which will result from a reduction in the price.

My friend, Dr. Strauss, spoke of a disruption in the price of silver which this sale might cause. I might add that there was no talk of disruption when the price of silver went from $6.50 to $48 an ounce in a year's period, approximately 800 percent. Now, when the prices are going down, for the benefit of the taxpayers, incidentally, there is a great deal of talk of disruption.

Finally, I would submit that the taxpayers would gain because the law, if I understand it correctly, requires that money received for the sale of excess strategic materials must be used for the purchase of those items that have been determined to be necessary.

And finally from the point of view of the taxpayers, the silver, which is on the books for about $1.30 an ounce, at present day prices of around $10 an ounce would gain the Government a profit of about $8.50 an ounce or well over $1 billion.

Thank you, Mr. Chairman.

Senator HUMPHREY. Thank you, Mr. Weeks.

Let me begin by asking about your association. Are any of your members those that would expect to benefit by a release from the silver stockpile during a period of war?

Mr. WEEKS. During a period of war?

Senator HUMPHREY. Yes.

Mr. WEEKS. I do not know if I understand the question. Excuse me.

Senator HUMPHREY. I notice that a lot of your members are jewelry and silverware manufacturers and so on, as is your own company. Do you have members who are involved in national defense requirements?

Mr. WEEKS. We have members in the association of course that produce and would produce articles using silver for the defense requirements of the country, batteries and so forth. And, of course, in World War II as other witnesses have pointed out, silver was used in articles such as film for the photography industry and so on.

If there is plenty of silver, and we feel there would be, making the case for the sale of the stockpile, other silver would be available from the Government.

Senator HUMPHREY. What was your members' reaction when silver went to about $45?

Mr. WEEKS. In January of 1979 when the price started up——

Senator HUMPHREY. Excuse me. What was the cause of that rise? Was it largely speculation? Was there a real shortage?

Mr. WEEKS. No; there was not a shortage at all. It was a speculative effort as the record indicates, and many, many articles have been written on the subject.

In the fall of the year business slowed down to a point where—I am speaking of my industry—by December of 1979 sterling sales had virtually ceased. There was a great deal of enthusiasm when the price was going up. The fever gets into the public and they feel that now is the time to buy in case it is going up some more. When it is up to an unreasonable level, of course, it gets to a point where people just cannot afford it.

Senator HUMPHREY. What started that speculative fever?

Mr. WEEKS. I do not know if I should give you my private opinion. There was a great deal of activity in speculative quarters in January of 1979 and before that time. We saw a situation where it was possible because of the enormous amount of money in the Near East and the enormous amount of resources available to certain people in the United States and the fact that it was possible to take a very, very large position in this metal. This affected the price and made it look like a good place to make money.

Also, of course, we had a political situation at that time that was unstable. The dollar was weak, and as you know in Europe and in the Near East when people are concerned about the political situation and the value of the dollar, it is traditional that they put their money into precious metals.

Senator HUMPHREY. What brought it down?

Mr. WEEKS. I think it got too high and Mr. Volcker at the Federal Reserve could give you a long discussion on the situation. But it got to the point where it was unreasonably high and it was in too few hands. There had been a lot of pyramiding going on and people began to worry about the collateral to the loans of these groups and so forth. It blew off.

Senator HUMPHREY. Your members I assume buy future contracts. You do not rely on spot markets obviously.

Mr. WEEKS. I think every company has a different procedure. Yes, generally I think they use the futures market.

Senator HUMPHREY. How far in the future do those go?

Mr. WEEKS. I cannot speak for our industry. I think the limit is 18 months. I think you can buy a futures contract 18 months out. A number of companies buy on the spot market. A number of companies use what is called a contango method which permits them to buy at a fixed price and pay the interest until the day of delivery. That happens to be a method that we use.

Senator HUMPHREY. But in any case, most of you had to bear the high prices ultimately.

Mr. WEEKS. That is right, because it was a situation where the rise in price was absolutely unprecedented. And as I mentioned a moment ago, the demand was unprecedented. It was a fever running in the system and a lot of people went out and bought gold and silver themselves, not only abroad but in this country.

Senator HUMPHREY. Do any of your members operate their own mine or have their own source of supply?

Mr. WEEKS. Not that I know of.

Senator HUMPHREY. Do you employ forecasters to estimate where the price of silver is going?

Mr. WEEKS. Yes. I think everybody uses advice. All of us need all of the advice we can get to keep our feet under us. Generally speaking, we are readers of material from many sources and we work with consultants and so on. I think we read material from the American Mining Congress and the Silver Institute as carefully as does my friend Dr. Strauss.

Senator HUMPHREY. The reason I asked that question was I was rather suprised to learn on Wednesday that the GSA does not attempt to forecast prices of any commodities for purposes of either buying or selling. It seems to me that we cannot do much worse than we have been doing. We have taken a shellacking on most transactions ultimately.

Would you not think it would be a good idea for GSA to have some experts who would attempt to forecast future prices?

Mr. WEEKS. I do not really think that is a function of a Government agency. We are supposed to operate in a reasonably free market, and very few of us are much good at predicting prices. I have a feeling that if the GSA predicted any prices except within the confines of their own organization for themselves, such prices would have some kind of stamp of approval from the Government and they could be accused of manipulating the market substantially worse than they would otherwise do.

Senator HUMPHREY. I can see your point. It certainly would be sensitive.

Let me ask you, as I asked Dr. Strauss, your opinion on the administration's silver numbers assumptions. FEMA says we will need 517 million ounces during a 3-year war. Would you agree with that figure?

Mr. WEEKS. To tell you the truth, Senator, I am not privy to the method they have used. We have taken the position that we will take the Government statistics. I have not done any particular research on this. We have the material that is published by the Government, by the Bureau of the Mines and the Commerce Department and others. We have made as an association no attempt to get behind the figures and to find out for any self-serving interest or any other reason that they are right or wrong.

Senator HUMPHREY. Has the Silver Users Association been approached by FEMA for advice?

Mr. WEEKS. I will have to turn this question over to Mr. Frankland.

Senator HUMPHREY. Do you participate on any commissions or have you ever been asked for any advice?

Mr. FRANKLAND. At the time of the last sale in 1967 we did participate in at least one, maybe there were two, sessions to explain

how the auctions would be held, the rate at which silver would be offered. I can recall at least two meetings that we had in that period. We have not had any since, although we do try to keep in touch with FEMA on this matter.

Senator HUMPHREY. Do you think it would be useful to have an ongoing body or commission?

Mr. FRANKLAND. I believe it would. I think it would serve a useful purpose to have representation from not only the producers but also the users, the end-use people, too.

Senator HUMPHREY. Do you suppose industry interest would be sufficient for them to pay their own expenses in that kind of an effort?

Mr. FRANKLAND. Yes; I think so.

Mr. WEEKS. Without any question.

Senator HUMPHREY. Again on the FEMA figures, they feel we would have an assured supply of 620 million as opposed to the need of 517 million. How do you feel about that, especially the Mexican and Canadian aspects?

Mr. WEEKS. Again I would take the figures. I know that I had a very interesting time among our producers 2 or 3 years ago in Senator McClure's State. There is a great deal of silver in this country. The man for example who ran one of the largest mines in Wallace told me that in the 75 years that that mine has been in operation it has taken more silver out of the ground than was ever taken out of the Comstock Lode and that there is more silver in the ground today than they have taken out of the ground.

So I am not worried about the amount of silver both mined above ground and unmined.

Senator HUMPHREY. But is that easily mineable? We know we have a lot of petroleum but it is not easy to bring up.

Mr. WEEKS. There is no question that it is a very expensive process to get a mine into operation. One of my friends out there told me that I guess it was American Smelting's mine, the Coeur mine, that more than $20 million were spent getting this mine ready before a ton of ore was taken out. So no one would beg that question.

On the other hand, the price of silver at $10 or $12 an ounce makes it much more attractive to mine it that when it was worth $6 an ounce or when it was worth 91 cents an ounce 20 years ago when I came into this industry.

Senator HUMPHREY. As the final question, let me go back to the charge that is thrown against your group; namely, that you are looking for some cheaper silver. Do you feel that historical evidence is that Government sales of silver, in recent times, have not produced any kind of a windfall to users or significantly depressed the price on the market?

Mr. WEEKS. As I mentioned, it had no effect on the price in 1967. Today, approximately 60 to 100 million ounces a week are traded and used in the country between the COMEX, the Chicago Board of Trade and so on.

Senator HUMPHREY. How much of that is turning?

Mr. WEEKS. Quite a bit, there is no question about it. But if we are talking about 500,000 ounces or 1 million ounces a week, that is a very, very small percentage of the total amount of silver being traded. Our industry uses less than 20 percent of the requirements.

As you may have noticed this morning in the Wall Street Journal there was an article on a new method of producing movies without using silver.

There is no question in our opinion that over a period of time the industrial requirements for the metal will probably go down on a percentage basis. There does not seem to me to be any reason to worry about supplies.

Senator HUMPHREY. You say that your membership uses only about 20 percent?

Mr. WEEKS. I mean our industry within the association. The association uses about 80 percent of the supply.

Senator HUMPHREY. What industries would represent that other 20 percent?

Mr. WEEKS. Other than our industry?

Senator HUMPHREY. Your association uses 80 percent of the silver?

Mr. WEEKS. Of the silver used in industry the silverware industry of which my company is one member uses less than 20 percent. The others are made up as we said.

Senator HUMPHREY. So of all industrial use of silver, your membership uses 80 percent.

Mr. WEEKS. Approximately.

Senator HUMPHREY. What would be the other industries that make up the difference?

Mr. WEEKS. I will defer to Mr. Frankland.

Mr. FRANKLAND. The other 20 percent would be across the board in various size companies that just have not seen the light to join the Silver Users Association.

Senator HUMPHREY. I see.

Thank you very much for your testimony. We appreciate it.

Mr. WEEKS. Thank you, sir.

Mr. FRANKLAND. Thank you, sir.

Senator HUMPHREY. There have been several requests from various organizations to submit written testimony for this hearing. I will include the following statements for the record.

PREPARED STATEMENT OF THE INDUSTRIAL DIAMOND ASSOCIATION OF AMERICA

LOOMIS, OWEN, FELLMAN & HOWE
(FORMERLY COUNIHAN, CASEY & LOOMIS),
Washington, D.C., June 19, 1981.

HON. GORDON J. HUMPHREY,
Chairman, Senate Subcommittee on Military Construction and Stockpiles, Dirksen Senate Office Building, Washington, D.C.

DEAR SENATOR HUMPHREY. We are writing in our capacity as the Washington representative of the Industrial Diamond Association of America. The IDA is an association composed of American companies engaged in the importing and dealing in industrial diamonds and American manufacturers who use industrial diamond materials in the manufacture of their products.

The Industrial Diamond Association has chosen not to appear personally and testify before the Military Construction and Stockpile Subcommittee but wishes to advise you of their position regarding the disposal of industrial diamond crushing bort from the stockpile.

The IDA is in favor of disposal of diamond crushing bort from the stockpile as long as the sale of such materials is conducted in an orderly fashion in a way which does not unduly disrupt the domestic industry. Further, the Association has long been on record as being opposed to sales of any diamond materials from the stockpile to foreign business interests, to foreign governments, or for any political purpose. Further, the Association is in favor of the materials being

offered for sale and sold in lots small enough in size to permit the many small American businesses interested in purchasing diamond materials to successfully bid on the diamonds in the stockpile.

The Industrial Diamond Association's present position regarding the sale of industrial diamond crushing bort from the stockpile is that the total amount of bort sold annually from the stockpile should not exceed 15% of the annual free world consumption (which under present conditions is approximately 3 million carats per year), or sales of no more than 450,000 carats per year.

We thank you very much for your continued consideration in this matter.

Very truly yours,

JAMES E. ANDERSON.

STATEMENT OF E. B. KING, PRESIDENT, GULF CHEMICAL & METALLURGICAL CO.

Gulf Chemical and Metallurgical Company ("Gulf Chemical") owns and operates the only tin smelter in the United States (the "Texas City Smelter"). The Texas City Smelter produces approximately 4,000 to 6,000 tons of tin per year, or about 10% of annual U.S. tin consumption. The remainder of the 40,000 to 60,000 tons consumed annually in the United States must be obtained from overseas sources.

As the operator of the only tin smelter in the United States, Gulf Chemical provides an important national service. Employing from 250 to 1,000 people for many years, the Texas City Smelter processes tin which otherwise would be processed abroad. The smelter has recently embarked on a $10,000,000 program to develop new smelting technology which is both environmentally and economically sound. The presence of the smelter also encourages the development of domestic tin mines. Moreover, the Texas City Smelter is the only reprocessor of secondary tin in the country. Finally, the Texas City Smelter provides a potential source of smelting and refining capability in a time of national emergency.

The international market for tin is centered in Southeast Asia, where approximately two-thirds of the Free World's tin is produced. Most of the area's tin is sold through the Penang Market. Each day buyers submit bids stipulating tonnage and price. These bids are compared with offers by producers, and an official Penang Market price is established daily. This price represents the delivery of tin ex-smelter Penang. The tin is shipped primarily to three markets: Europe, the United States and Japan. The London Metal Exchange ("LME") is the center of the European market, and New York is the center of the U.S. market.

Generally, it takes approximately 60 days to ship tin from Penang to the United States. The cost of shipping the tin—interest on money used to purchase tin in Penang for 60 days, transporting the tin to the vessel, ocean freight charges, weighing and miscellaneous expenses—plus the price of tin ex-smelter Penang constitutes the U.S. Replacement Cost.

The U.S. Replacement Cost affects the Texas City Smelter in two respects. First, the Penang Market sets the standard for tin prices throughout the world, including the tin concentrates purchased overseas by the Texas City Smelter. The price of these tin concentrates is approximately equal to the U.S. Replacement Cost less deductions for the costs of processing the concentrates into refined tin. Second, the U.S. Replacement Cost influences the domestic market in which the Texas City Smelter sells its tin. This tin must be sold in the United States since shipping it abroad would mean incurring transportation and interest costs a second time, thus pricing the Texas City Smelter out of the market.

The domestic price, set in the New York market, is tied directly to the U.S. Replacement Cost. At times when the U.S. Replacement Cost exceeds the New York Market price, traders cannot profitably sell tin in the United States. They will seek to divert tin purchased ex-smelter Penang from the U.S. to another market, such as Europe or Japan. The Texas City Smelter, on the other hand, does not have this option. It must sell its tin in the United States at the New York market price or store the tin—both being losing propositions. For the Texas City Smelter to make a profit, the New York Market price must equal the U.S. Replacement Cost.

There is one domestic source of tin in addition to the Texas City Smelter. By the Strategic and Critical Materials Transaction Authorization Act of 1979 (the "Act"), Pub. L. No. 96-175, 93 Stat. 1289, Congress authorized the General Services Administration ("GSA") to dispose of 30,000 tons of tin from the national strategic stockpile into the domestic market. If this amount of tin were sold

over three years, as proposed by GSA, annual sales would be twice the annual output of the Texas City Smelter and would constitute approximately 20 percent of domestic sales.

Gulf Chemical supported passage of the Act. Testifying before the House Subcommittee on Seapower and Strategic and Critical Materials on May 15, 1978, I endorsed the sale of as much as 100,000 tons of tin from the stockpile. I recognize that it is in the public interest to dispose of much of this tin, and I stated that carefully programmed sales would stabilize the tin market. I warned the Subcommittee, however, that improperly conducted sales could destabilize the market and damage the Texas City Smelter.

Congress incorporated these concerns into the Act. Section 4 requires that GSA's disposal of tin conform to the provisions of the Strategic and Critical Materials Stock Piling Act, 50 U.S.C. § 98 et seq. That Act provides that "efforts shall be made in the . . . disposal of such materials to avoid undue disruption of the usual markets of producers, processors, and consumers of such materials . . . ." 50 U.S.C. § 98(e).

A common refrain in the legislative history of the Act is the recognition that GSA sales should not disrupt the market and, in particular, should not damage the Texas City Smelter. The House Report specified that the disposals "should be made on an orderly basis and made with due consideration of avoiding the disruption of normal markets of domestic producers of tin." H. Rep. No. 96–56, 96th Cong., 1st Sess. 3 (March 20, 1979). The GSA official in charge of the stockpile program confirmed that sales would "avoid market disruption and . . . would be reduced or suspended during months of significant relative price weaknesses." H.A.S.C. No. 96–3, 96th Cong., 1st Sess., 203 (March 2, 1979). He further testified that the Texas City Smelter would be protected from adverse economic impact. Id. at 15. Senator Tower, a floor manager for the bill which became the Act, recognized that a poorly executed GSA tin disposal program would threaten the Texas City Smelter's existence. He therefore told the full Senate that GSA "must assure that there is no undue disruption of the tin market. . . . There must be no misunderstanding as to GSA's responsibilities in this matter." 125 Cong. Rec. S14652–14153 (daily ed. Oct. 16, 1979).

Evidently, however, there has been a major misunderstanding in this matter. Rather than avoiding undue market disruption, GSA has embarked on a tin disposal program which could not be more disruptive of the Texas City Smelter's operations. GSA has damaged the Texas City Smelter in two ways. First, it has accelerated sales as the tin market has become more depressed, thus cutting into a shrinking market. Second, the marketing techniques used by GSA, specifically "off-the-shelf" sales made for "prompt" delivery, directly undercut the market of the Texas City Smelter.

The sales by GSA in a depressed market disrupt the world market as well as the Texas City Smelter's market. These sales have been the subject of strong protests by foreign tin producers and are inconsistent with U.S. obligations under the International Tin Agreement ("ITA"), 1975, 28 U.S.T. 4619, T.I.A.S. 8607. Article 43 of that agreement requires signatory nations, including the United States, to conduct disposals from non-commercial stockpiles so that markets are not disrupted. The ITA also set up the International Tin Council ("ITC"), which manages a buffer stock of tin to moderate price fluctuations. Using the official Penang Market prices, the ITC established various price ranges for controlling the discretion of the buffer stock manager. There is a neutral range in which no action may be taken, a range above that in which the manager may sell, and a range below the neutral range in which the manager may buy. On June 5, 1981, the neutral range was $5.74 to $6.27 per pound. Above that range, the manager may sell; below, he may buy.

As a signatory of the ITA, the United States has approved the use of the ITC as a market stabilizer. In fact, in the legislation authorizing the disposal of stockpile tin, Congress authorized the contribution of 5,000 tons of tin to the ITC. The Act, §5.

From the time GSA initiated its present off-the-shelf sales technique until June 5, 1981, approximately 97 percent of its sales have been at prices below the ITC "may sell" range, and approximately 43 percent have been in the ITC "may buy" range. These sales are inconsistent with the operation of the buffer stock, and they necessarily disrupt the market which the ITC was meant to stabilize. As the only major source of tin which is not tied to the official Penang Market price, GSA is an external market force akin to the buffer stock manager. By selling without regard to its special place in the market, GSA exerts down-

ward pressure on tin prices and disrupts the tin market. Moreover, GSA's sales in a depressed market compete directly with tin produced by the Texas City Smelter.

Curiously, GSA refused to sell tin last summer and early autumn when prices were considerably higher than today, averaging about $7.72 per pound. Under the sealed-bid procedure, now discarded, GSA received bids which were within 1 to 3 percent of the New York Market price. Yet after nine bi-weekly sales, GSA had accepted only one bid, for five tons of tin. Sales at this time would have been within the ITC "may sell" and "must sell" ranges, and they would have had the salutary effect of pushing prices toward the ITC neutral range, as well as increasing GSA revenues. GSA's refusal to sell tin when the market was strong can only be seen as bizarre in light of GSA's determination today to dump tin into a depressed market.

The sales procedures adopted by GSA have also caused harm to the Texas City Smelter. Initially GSA conducted a bi-weekly sealed bid program, but on October 22, 1980, GSA chose to move to an off-the-shelf method. GSA sells tin daily, announcing its price each day at 1:00 p.m. This price is for "prompt" tin, that is, tin which is ready for immediate delivery. The price set by GSA has consistently been below the New York Market price for "prompt" tin.

These sales procedures are injurious to the Texas City Smelter in several, ways. First, by consistently pricing its tin below the New York Market price, GSA exerts downward pressure on the New York Market price and distorts the relationship between that price and the U.S. Replacement Cost. Since the Texas City Smelter incurs expenses approximately equal to the U.S. Replacement Cost and cannot sell at a price above the New York Market price, the off-the-shelf sales create losses for the Texas City Smelter every time it sells tin.

Second, GSA sales procedures have distorted the traditional relationship between the traders and Gulf Chemical. Sales on the New York Market generally are made for delivery in two months, the time it takes for tin to be transported ex-smelter Penang to the United States. Traders continue to make such contracts, but now do so with the expectation that they can fill the contract with low priced GSA tin at the last minute and divert the original supplies to more attractive markets. Knowing that they can depend on these daily GSA sales for low prices and immediate delivery, traders are offering lower prices on their forward contracts, thus undercutting the Texas City Smelter, which does not have the ability to divert its output to foreign markets.

Similarly, GSA sales procedures have interfered with Texas City's customers. Tin consumers, such as steel mills, have traditionally used forward sales contracts to insure secure supplies of tin. These consumers now know they can purchase off-the-shelf tin from GSA at the last minute. This has further disrupted the Texas City Smelter's market. GSA has also embarked upon an aggressive sales campaign to urge tin consumers, including regular customers of the Texas City Smelter, to buy GSA tin. The result of this interference has been severe economic injury to the Texas City Smelter.

Finally, GSA has failed to consult with Gulf Chemical on the nature of the tin disposal program. At the hearings held during consideration of the Act, GSA represented that it would consult with the tin industry on the development of the tin disposal plan in order to learn what effect the plan would have on the tin market. Hearing on S. 27 and H.R. 595 before the Subcommittee on Military Construction and Stockpiles of the Senate Committee on Armed Services, 96th Cong., 1st Sess., 11 (July 10, 1979). Before instituting the off-the-shelf sales method, however, GSA did not consult with Gulf Chemical. Gulf Chemical subsequently submitted two letters protesting GSA's off-the-shelf sales and explained how that method of disposal disrupted the tin market. GSA has continued to ignore the views of Gulf Chemical.

In order to obtain a fair hearing of its views, Gulf Chemical has been forced to take legal action. On June 10, 1981, Associated Metals & Minerals Corporation, the parent corporation of Gulf Chemical, filed an action in the District Court for the District of Columbia to enjoin the present GSA tin disposal program. We also ask this Subcommittee to exercise its oversight authority for stockpile sales and to review the tin disposal program. GSA's disregard of the Congressional admonition to protect the market of the Texas City Smelter, together with its refusal to sell tin when the market price was high, deserve careful scrutiny by this body.

PREPARED STATEMENT OF NORRIS B. MCFARLANE, MACALLOY CORP.

Mr. Chairman: My name is Norris McFarlane and I am the President, Chief Operating Officer and majority owner of Macalloy Corporation. I have been looking forward to this formal opportunity to bring to the attention of the Congress the alarming facts relative to the state of our industry which means a direct effect on the stockpiling, and more important, the industrial mobilization planning policies of the nation.

As a matter of general information, Macalloy Corporation has the largest domestic ferrochromium plant in the United States. Our annual capacity is 70,000 tons which represents 38 percent of U.S. domestic capacity (domestic capacity is estimated at approximately 190,000 tons/year). For clarification, when we talk of tons we are referring to the "tons of contained chromium". Our product is a strategic material. This classification is a function of its non-substitutability in the production of stainless and specialty steel. In light of the work of this Committee and numerous reports on strategic minerals with the constant inclusion of chromium, I will refrain from expanding on the unquestionable and irreplaceable role ferrochromium plays in the civilian and military industries.

In basic terminology our industry takes chrome ore, processes it in our large submerged arc furnaces, and produces the ferrochromium. As an industry, we have been on the "endangered species" list since about 1973. A dubious recognition that resulted in favorable ITC Rulings in 1978 and an eventual Presidential Determination. One can understand the uncertainties that have and do exist in our industry. The financial aspects are of an obvious business concern, but also there is the role into which our industry has been cast relative to the national security of the country and the realization that we are at that point where we cannot meet that responsibility.

Other than ourselves there are three companies still in the "production" of ferrochromium:

Satralloy Inc. in Steubenville, Ohio whose plant has not been in production for the past twelve months. It is our understanding that they have just recently started one furnace to convert chrome ore for another firm.

Globe Metallurgical Division of Interlake, Inc. which has been producing high carbon ferrochromium.

Chromium Mining & Smelting Corporation has not been producing high carbon ferrochromium for a year.

(Note: Union Carbide does have a plant in Marietta, Ohio, which has in the past produced high carbon ferrochromium and it is conceivable they might do so again.)

We would like to briefly review with the Committee the primary reason why we and our industry find itself in this untenable position, relate some of the inconsistent actions that further compound our problem, and our inability to date to see the expression of our concerns result in any substantive action by the Executive Branch of the government.

1. The condition of our industry as of September, 1978, is documented history. The International Trade Commission in its Report to the President on Investigation No. TA–201–35 spells out that we were being injured by imports. A review of the statistics clearly points up that fact and more importantly they reveal that the major source is South Africa (please refer to Enclosures A and B). In November the President provided relief in the form of an increased tariff of $.04 per pound of chromium contained in high carbon ferrochromium which enters the United States at a value of less that $.38 per pound F.O.B. point of shipment. This relief, much less than recommended by the ITC, has been a partial success. Unfortunately, as inflation and increased operating costs took their toll, the fixed $.38 base price was neutralized and we find ourselves again at the mercy of the marginal pricing of South African suppliers. The effects of the relief are set out statistically in Enclosures C and D. An obvious move toward recovery in 1979, but with the weakening of the influence of $.38 base combined to a lesser degree with the downturn in the economy, that short movement toward recovery was erased in 1980. As a matter of record, we at Macalloy have been able to sustain a breakeven position through this period.

Mr. Chairman, it is not necessary to belabor the declining trend in our industry—the facts are public knowledge and the intent of the major supplier is quite clear. What we would like to bring to your attention is the apparent indifference of the Executive Branch to the true plight of one of its critical industries.

In December 1977, the ITC held their first hearings and in their Report TA–201–28 recommended strong relief. The President decided not to grant the relief. We are not privy to all the factors relating to the decision making process that occurred. It would seem to us that in view of the national security aspects, of the industry and the ramifications on our industrial mobilization, that our plight would raise a true concern. Nothing! It was the Congress, through the action of the Ways and Means Committee, that "motivated" the ITC to hold new hearings (the same results were reported the second time around) and place the issue again before the President.

The reluctant imposition of a less responsive relief was even a further indication of the overall lack of concern.

2. In face of the large production capacity of South Africa as compared to its own domestic needs, one readily understands their need for deep market penetration in offshore consuming nations. They have followed the traditional high volume, low pricing programs to establish themselves in these markets. The imbalances between the United States and Europe/Japan tariffs as a result of the Kennedy Rounds has made our market more attractive to them. Every attempt to have the Administration rectify this in the Tokyo Round of tariff negotiations was unsuccessful. Our recommendation to our negotiators was to either adjust ours up to their 8 percent ad valorem, or lower theirs down to our approximate 1.9 percent. This did not happen. Once again we feel that in major part it is because of the relative size of the industry that our proposal did not receive the internal concern within the Administration. Today we, an industry threatened with extinction by exports, are further disadvantaged by action or inaction of the government.

3. There has been much discussion since the Love Canal environmental scandal about hazardous waste and as a result the "Superfund" legislation was passed by the 96th Congress. Chromium is subject to an environmental tax because there is a toxic form of chromium when it is in it's hexavalent state, something that does not occur in our processes. We develop the non-toxic trivalent form. However, under the law we are subject to the environmental tax. At the eleventh hour we had managed to get agreement from EPA relative to our industry and, had the legislation been subject to normal procedures, an appropriate amendment would have excluded chrome ore used in the production of ferrochrome from the tax. Hopefully, this particular legislation will be reviewed and appropriate steps will correct the matter this session. Once again we see an Administration process in which a small but strategically vital industry is not given the appropriate attention and consideration. The net result is that as of today we, the import beleaguered industry, must increase its costs by a tax, while the foreign supplier does not, providing them with still a further economic edge.

Mr. Chairman, we have pointed up three specific examples which have occurred in the past three years which clearly have demonstrated an inconsistency in in government policy toward our industry. On the one hand we are depended upon to be able to meet our nation's requirements in the event of a national emergency, while at the same time there is a reluctance on the part of the government to take responsible actions to ensure fair consideration for the facts and circumstances surrounding the bold threats to our industry's existence.

We have not asked for a free ride—on the contrary, we at Macalloy are constantly working for solutions to make ourselves more efficient and competitive. Our latest effort is a co-generation project whereby we will utilize the wasted energy inherent with a furnace operation to generate steam that can be used by others. There are many benefits to be gained from this project. However, there is the upfront cost in the vicinity of $60 million that must be handled. In that the present program would have the steam piped to our neighbor the Navy at the Charleston Navy Yard, we looked to the government for some form of economic support. We are also pursuing other economic approaches and hopefully can bring this program to pass.

I would like to expand a moment on the basic principle, which I have not heard questioned specifically, but based on our recent experiences one concludes that the seriousness attached to it is in question. There have been several recent studies and reports on the subject of chrome and other minerals which address our dependency on offshore suppliers. Limiting my remarks to our primary

material chrome ore, I would point out that the reports with their recommendations include a viable domestic ferrochromium production capability. The most detailed report, Contingency Plans for Chromium Utilization put out by the National Research Council, assumes this domestic capability. Right now the major known reserves are in South Africa and Rhodesia, but we buy chrome ore from around the world and it is this flexibility that will prevent us as a nation from being in the untenable position of complete dependency on limited sourcing. In addition to our traditional suppliers, there are potentially new sources that are opening such as Albania and Sudan. The primary point being that it is in the national security interest of the United States to maintain the options available by domestically producing high carbon ferrochromium. The alternative, i.e., importing the ferrochromium, will result in an immediate dependency on South Africa.

Relative to the specific issue of the stockpile we would recommend that our objectives be changed in the form of the material held in reserve. In light of the rapid degeneration of production capacity in the United States, and the pragmatic question of what will be available in the future, we do not feel it is prudent to maintain chrome ore. As pointed out, two of the smaller plants have been cut of production for over a year. There are large quantities of chrome or stored at these locations as there is at Macalloy. I would not think it is prudent planning to delay the upgrading of that material. A continuation of the argument for action of this kind is both economic and operational. It is obvious the cost of conversion is escalating and a program with today's economics will result in great savings in the future. Then there is the question of the drain on the nation's power grid at the time of national emergency. Major identifiable energy requirements than can be handled in advance of a national emergency will result in the nation's better reaction to that emergency. We carried this concern to the government as recent as last fall without any definitive response.

In closing it is important to point out that what is happening to the ferrochromium industry is not unique. As a member of the Ferroalloy family, we have witnessed the same demise to sister industries. To this end we wish to submit for the record the "Statement by the Ferroalloys Industry Concerning Imports and the National Security" of May, 1981.

Mr. Chairman, we need help and we can only turn again to the Congress and petition your aid.

ENCLOSURE A

[Tons contained chromium]

	1973	1974	1975	1976	1977	1978
Total imports	71,916	71,319	158,055	107,307	109,847	171,113
Total imports as a percent of U.S. consumption	42.7	37.8	127.7	68.9	56.4	73.3
South African imports	23,451	24,512	41,101	41,381	56,806	131,110
South African imports as a percent of total imports	32.6	34.4	26.0	38.6	51.7	76.6
South African imports as a percent of U.S. consumption	13.9	13.0	33.2	26.6	29.2	56.2

Source: U.S. Bureau of Mines, International Trade Commission, Report No. TA-201-35.

ENCLOSURE B

[Tons contained chromium]

	1978	1979	1980[1]
Total imports	171,113	122,223	158,78
Total imports as a percent of U.S. consumption	73.3	48.5	78.9
South African imports	131,110	91,532	123,474
South African imports as a percent of total	76.6	74.9	77.8
South African imports as a percent of U.S. consumption	56.2	36.3	61.4

[1] Preliminary data.

Source: U.S. Bureau of Mines.

ENCLOSURE C

[Tons contained chromium]

	1973	1974	1975	1976	1977	1978
U.S. production	158,550	144,910	78,071	105,237	112,803	98,865
Use of U.S. production capacity (percent)	82	88	41	55	57	52
U.S. consumption	168,539	188,728	123,772	159,480	194,793	233,297
U.S. market share (U.S. production plus U.S. consumption)[1] (percent)	94.1	76.8	63.1	66.0	57.9	42.4
Net profit (loss) before taxes	$4,413,000	$20,083,000	$13,205,000	$6,807,000	$2,100,000	($9,612,000)
Profit as percent of sales	6.8	20.6	16.7	8.9	4.0	(13.2)

[1] Since the consumption data reported to the Bureau of Mines is understated, total U.S. consumption exceeds the total reported by the Bureau. Consequently, any percentage of reported consumption—whether of U.S. production or of capacity will be a somewhat higher number than if it were based on total comsumption.

Source: U.S. Bureau of Mines, International Trade Commission, Report No. TA-201-35, HCF Committee.

ENCLOSURE D

[Tons contained chromium]

	1978	1979	1980	1981 (1st quarter)
U.S. production	98,865	135,762	99,500	23,525
Approximate use of U.S. production capacity[1] (percent)	52	71	52	50
U.S. consumption	233,297	252,102	201,253	[2]
U.S. market share (U.S. production divided by U.S. consumption)[3] (percent)	42.4	53.9	49.4	[2]
Net profit (loss) before taxes	($9,612,000)	($2,082,000)	($10,182,000)	[4]
Profit as percent of sales	(13.2)	(1.9)	(10.5)	[4]

[1] Capacity is conservatively estimated at 190,000 tons per year, on the basis of ITC Report No. TA-201-35, p. A-22.
[2] Data for the full 1st quarter on U.S. consumption is not available as of the date of the petition.
[3] Since the consumption data reported to the Bureau of Mines is understated, total U.S. consumption exceeds the total reported by the Bureau. Consequently, any percentage of reported consumption—whether of U.S. production or of capacity will be a somewhat higher number than if it were based on actual total consumption.
[4] Extraordinary circumstances do not now permit a precise calculation of losses for the 1st quarter of 1981. However, all 4 companies suffered losses on a going concern basis during the quarter.

Source: U.S. Bureau of Mines, HCF Committee.

SUMMARY OF THE STATEMENT OF THE FERROALLOYS INDUSTRY CONCERNING IMPORTS AND THE NATIONAL SECURITY

1. Because of a rising tide of low-priced ferroalloy imports, the survival of the domestic ferroalloys industry is in grave doubt. Relentless and intensifying import pressure has led to depressed domestic prices; declining domestic capacity, production and capacity utilization; and marginal domestic profitability (or actual losses). Well over half the U.S. market for certain critical ferroalloys has been seized by foreign producers.

2. Ferroalloys are essential to our military preparedness and industrial strength because iron, steel, stainless steel, superalloy and aluminum products cannot be made without the use of chromium, manganese and silicon ferroalloys and metals.

3. Thus, our national security — whether during war or in peacetime — depends upon an assured and reasonably priced supply of ferroalloys. Only a healthy domestic ferroalloys industry can assure the nation of that supply; stockpiling of ore and even of processed ferroalloys is no substitute for a viable American processing capacity.

4. Without prompt action to restrain the invasion of foreign ferroalloys, the decline in America's ferroalloys industry will become irreversible. Our country will become more and more dependent on a limited number of overseas sources for products essential to our national security. Such increasing dependence will make us ever more vulnerable to political, economic and military actions by foreign countries.

5. The conclusion is clear — ferroalloy imports are not just threatening but are already impairing our national security. Accordingly, there should be import relief under the National Security Clause (Section 232) of the Trade Expansion Act of 1962. Indeed, such relief is essential if the domestic industry is to survive.

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STATEMENT BY THE FERROALLOYS INDUSTRY CONCERNING IMPORTS AND THE NATIONAL SECURITY

Industry Profile

Behind every American power plant generating electricity for industrial and residential use, behind every stretch of rails linking American cities, towns, factories and farms, behind every jet fighter guarding American airspace, behind every American satellite transmitting messages to and from outposts throughout the world — indeed, behind virtually every element of our national transportation, communications and defense systems — stands the American ferroalloys industry.* Ferrochrome, ferromanganese, ferrosilicon and other ferroalloy products are indispensable to the manufacture of steel, iron, superalloys and aluminum. Without a domestic capability to produce those ferroalloy products, a large part of America's industrial base would be left at the mercy of foreign countries.

Developments during the past decade have made this prospect of foreign dependability all too real and have greatly increased the vulnerability of our country to future shortages and price escalations. Only prompt action by the United States Government will preserve the viable domestic ferroalloys industry that is so essential to our national security and industrial strength.

Ten years ago, the Office of Emergency Preparedness declared, "There is no question in principle regarding the importance of a healthy domestic ferroalloy industry to the national security."** Since then, unfortunately, the health of the American ferroalloys industry has steadily worsened to a point at which its survival — and, with it, the national security — is in jeopardy. The industry suffers from declining production and artificially depressed prices, resulting in marginal profitability or actual losses.

The chief cause of the industry's problems is clear: imports. Imports, which averaged 20 percent of total U.S. sales in the early 1970s, had captured almost half of the U.S. market by 1980. Unless the tide of imports is stemmed, the domestic industry will continue to grow smaller and weaker, and our nation's vulnerability greater. The trend will become irreversible if corrective action is not taken quickly.

The ferroalloys industry submits that its present circumstances call for application of Section 232 of the Trade Expansion Act of 1962 — the provision authorizing the President to order import relief when imports threaten to impair the national security. This paper does not seek to explore this issue fully; its purpose is only to demonstrate briefly (i) the importance of the ferroalloys industry to the national security, (ii) the grave injury to the industry caused by imports and (iii) the appropriateness of invoking Section 232.

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*The U.S. ferroalloys industry consists essentially of 16 companies producing ferroalloys for sale in the open market, each of which supports The Ferroalloys Association's request for import relief. A list of these companies and the locations of their plants is attached as Exhibit A. Also included on that list is information concerning the so-called "captive" producers of ferroalloys, which produce ferroalloys only for their internal consumption as producers of aluminum, ferronickel and silicone chemicals.

**Although OEP then found that ferroalloy imports had not yet threatened the national security, imports were far lower and the industry was in far better condition than is the case today.

The National Security Requires a Healthy Ferroalloys Industry

Whether our country is at war or at peace, the security of the United States demands a strong domestic ferroalloys industry. Ferroalloys are necessary to produce iron, steel, superalloys and aluminum and are of critical and strategic importance to any war effort. It is impossible to manufacture missiles, tanks, aircraft, guns and other forms of modern military hardware without an adequate supply of ferroalloys. Moreover, it would be impossible to sustain the nation's industrial strength without having the ferroalloys needed to produce efficient electrical generators and motors, petroleum refineries, chemical plants, more fuel efficient autos and trucks, machines and machine tools, silicone chemicals and aluminum castings, to name just a few of the vital components of our industrial economy which are dependent on ferroalloys. The need for a healthy U.S. ferroalloys industry would be especially critical during a war, as the military and industrial demand for ferroalloys would expand rapidly at just the time that ferroalloy imports (most of which come from overseas sources) would become least reliable.

But the country's security needs are by no means limited to the event of war. Since ferroalloys are essential to the maintenance and growth of our sophisticated industrial economy, our economic prosperity, and with it our national security, require a strong U.S. ferroalloys industry during peacetime as well as during war. OPEC has taught us the grave security implications of economic dependence upon foreign sources for materials critical to our economy. Unless the nation has substantial and active capacity to process ores into ferroalloys, its industrial economy will be hostage to the sudden supply interruptions and price escalations of foreign producers. Indeed, if the nation is truly to upgrade its industrial strength and its defense capability in the next few years, we must halt and indeed reverse our growing dependence on foreign sources of ferroalloys.

Ferroalloys are processed from chrome, manganese and silicon ores. While the United States has vast supplies of silica (the chemical term for quartz), it does not, for present practical purposes, have either chrome or manganese ore of metallurgical quality. The sources of chrome ore are heavily concentrated in southern Africa and in Communist countries, and those areas are also major sources of manganese.

Yet there is a tremendous difference in security terms between dependence on raw materials and dependence on processed products. Grave as is our reliance on foreign crude oil, the security risk would be much higher if we did not have our own capacity to refine the crude we import. When a nation has a viable refining capacity, it has the assurance of knowing that it can satisfy its needs for the processed product so long as it can obtain the raw material. As was the case in the 1973 oil embargo, raw materials often make their way into the world market even during a crisis — but only to those countries able to process them.

Without the capability to produce ferroalloys, we would become dependent not just on the off-shore mining and shipment of chrome and manganese ores but on the foreign processing of those ores (and of quartz) into ferroalloys as well. In that event, it would not be enough for the United States to find the ores somewhere in the world's markets or even to develop low-grade domestic sources. The nation would have to pay artificially high, possibly exorbitant, prices for the ferroalloys it cannot do without. Furthermore, since ferroalloy processing

facilities are more technically advanced than ore mines, they are more susceptible to breakdown during a crisis. That additional dependence on foreign processing capability would thus increase the nation's security risk substantially.

Furthermore, the existence of an American ferroalloys industry is a critical factor in reducing U.S. dependence on a limited number of sources for ore (such as southern Africa and the USSR). It is well established that the quantity of raw material reserves often expands with increased demand. The more ferroalloy producers there are in countries without large reserves of certain ores (such as the U.S.), the more incentive countries with small or potential mineral resources have to become (or remain) significant alternative sources of ore. For example, the fact that a major U.S. ferrochrome producer was in business and needed to buy chrome ore in the 1970s spurred Finland to develop quickly substantial chrome reserves (which that producer then bought) that had not theretofore been considered an important source of chrome ore.

Imports Threaten to Ruin the American Ferroalloys Industry

There is no question but that imports are the primary cause of the American ferroalloys industry's crisis. The American industry is as modern, efficient and technologically innovative as the other ferroalloy producers in the world. The U.S. industry can compete effectively in a free and fair fight for orders, but it cannot withstand the decade-long onslaught of foreign exporters using a variety of techniques to seize U.S. ferroalloy business by offering prices which domestic producers cannot profitably meet.

Ferroalloy imports were some 16 percent of domestic consumption in 1968, the year on which OEP focused over a decade ago in finding that those imports had not yet become a threat to the national security. Since then, the share of the market captured by imports has risen steadily. By 1974, imports had seized close to 30 percent of the U.S. market. By 1977 market penetration had increased to almost 40 percent, and since 1978 that penetration has been close to 50 percent. Imports of chrome and manganese ferroalloys have averaged about two-thirds of U.S. demand during the last five years. And, imports of silicon metal and ferrosilicon have also mushroomed, to 20 percent and more of the U.S. market, even though this country has a plentiful supply of high-grade, inexpensive quartz.

Because the ferroalloy of one producer is fungible with that produced by another, ferroalloys compete largely on the basis of price; it is usually through price cutting that imports have achieved their enormous market penetration. Some exporters — especially those outside of western Europe and Japan — have taken advantage of lower costs which result from minimal pollution control and other regulatory requirements and inexpensive labor. Exporters have often been the beneficiary of subsidies — as successful industry countervailing duty cases against Brazil, Spain and South Africa have demonstrated. Some exporters have sold material at prices that seem to have been uneconomically low if measured against the costs of production, but that have furthered an apparent strategy of achieving market penetration on the basis of price. Furthermore, since American duties on ferroalloys are lower than those of the other principal world markets (the European Community and Japan) and since the United States has been far more generous than the EC and Japan in extending the duty-free benefits of GSP to less developed countries, the American ferroalloy market has become the most attractive for exporters throughout the world.

The import surge has not only drastically reduced domestic ferroalloy sales but also, by suppressing and depressing prices, drastically reduced the domestic industry's revenue per unit sold. The results have been disastrous: Table 1 and Chart 1 each show that, as imports have surged during the last decade, shipments by, and the market share of, the U.S. industry have plunged steadily. Furthermore, as Table 2 demonstrates, the industry's profits have virtually disappeared: during each of the last four years the industry has either incurred losses or barely escaped them.

The industry's recent experience has had a predictably destructive impact on investment decisions, dictating very low investment levels for U.S. producers. After all, what producer can undertake expansion or modernization when production declines in spite of increases in demand, when profits are non-existent, and when all it can foresee is a rising tide of cut-rate imports?

The industry has pursued vigorously a number of traditional routes to import relief, but those have not stemmed the tide of low-priced imports. All or some of the industry's members have in recent years brought various actions under the escape clause and the antidumping and countervailing duty laws with respect to particular products and importers; and, the industry has fought the one-sided duty and GSP structure which has been imposed upon it.

But, in spite of victories in some of these actions, these efforts have not resolved the industry's plight, because they have been piecemeal approaches to a highly integrated and complicated problem. The traditional import relief laws focus on particular products from particular countries over short periods of time. But the industry's crisis is a long-term and continuing one, resulting from imports of several products from many sources whose low prices have a variety of causes that are not uniform over time. Even apart, then, from the significant legal, administrative and political limitations that have greatly reduced the effectiveness of these laws, none of them is well suited to address the kind of complex and chronic import problem that besets the ferroalloys industry. Consequently, these traditional avenues to obtaining import relief cannot be expected to give the industry the long-term help it needs.

Unless something is done to halt the onslaught of low-priced imports, it may be too late to preserve a viable domestic industry. As Chart 2 demonstrates, the U.S. capacity to produce chromium and manganese ferroalloys fell by over 40 percent from 1970 to 1980. And, as Chart 3 shows, the industry was able to use only some two-thirds of its capacity in 1980, resulting in a disastrous profit situation which in turn will cause further cutbacks in capacity, even as U.S. demand for ferroalloy products grows.

The U.S. chrome and manganese ferroalloy capacity has thus already been greatly reduced and, unless the situation improves soon, will be eliminated. The growth of silicon ferroalloy capacity has been significantly inhibited, and silicon capacity will decrease if imports continue to grow until even the U.S. silicon industry will be able to supply only a small fraction of America's needs. Without prompt relief from ferroalloy imports, the U.S. will become almost wholly dependent on foreign sources for these essential products. Since those off-shore sources will be especially unreliable during a war or lesser international crisis, the nation will have foolishly and needlessly mortgaged its national security and economic independence for the indefinite future.

Section 232 Affords the Means to Remedy this Security Crisis

One of the elements of the nation's revitalization of its industrial strength and defense capabilities must be the preservation and promotion of a strong domestic ferroalloys industry. At a minimum, this requires that the producers of chrome and manganese alloys be helped to maintain their present market positions, and that the silicon side of the industry be helped to become strong enough to repair its health.

The National Security Clause provides an ideal tool for addressing the crisis which confronts the American ferroalloys industry. It permits the examination both of the industry's present plight and of the long-range causes of, and potential solutions to, that crisis. It provides a means by which the United States Government can recognize that the industry is essential to the national security and can then take action necessary to preserve it.

Providing import relief to the domestic industry is consistent with the Government's longstanding recognition of the importance of the ferroalloys industry to the national security. That recognition has led to the inclusion in the national stockpile of both ferroalloy ores and processed ferroalloys. But a stockpile is no substitute for a viable industry. Since much of the stockpile is held in the form of ores rather than processed ferroalloys, those reserves will have little utility unless there is a substantial domestic industry capable of processing them to ferroalloys in a war or other crisis.

It would be difficult, if not impossible, to rebuild capacity quickly if a national crisis suddenly arose. To acquire new ferroalloy furnaces from the one American manufacturer which produces them would require at least a two to three year lead time. Furthermore, the ferroalloys industry depends upon a small number of highly trained furnace operators with special skills. Unless there is an ongoing industry to keep those furnace operators employed, they will take other jobs and be unavailable (and perhaps unfindable) if the industry needs to be resurrected during a crisis; and their skills simply could not be readily replaced to permit a prompt response to that crisis. Thus, even a fully converted stockpile would likely be insufficient to keep the nation's military and industrial machine operating at the levels required in the event of any war or lesser crisis that is prolonged beyond the three-year period on which the stockpile is based.

What the domestic ferroalloys industry needs — what the United States needs — is long-range import relief that can enable the industry to survive and to provide the nation with the productive capacity its security requires. The industry is flexible about the form that such relief might take. But under present circumstances, neither the ferroalloys producers nor the United States can afford to be flexible about the need for strong, prompt action to preserve an industry so critical to our national security.

TABLE 1

DOMESTIC SHIPMENTS – IMPORTS – MARKET SHARE
Chromium, Manganese and Silicon Ferroalloys
(000 Short Tons)

	Domestic Shipments	Imports	Domestic Producers Market Share (%)
1970	2,242	373	86
1971	2,175	388	85
1972	2,196	586	79
1973	2,537	717	78
1974	2,169	828	72
1975	1,638	859	66
1976	1,805	994	64
1977	1,658	1,013	62
1978	1,576	1,286	55
1979	1,667	1,309	56
1980	1,340	1,086	55

Sources: U.S. Bureau of Mines;
The Ferroalloys Association

TABLE 2

U.S. Ferroalloys Industry Sales and Profits

Chromium Alloys	1976	1977	1978	1979	1980
Sales ($000,000)	140	151	128	154	190
Profit - Before Tax ($000,000)	19	5	(17)	4	(8)
Profit - After Tax ($000,000)	9	1	(13)	-0-	(10)
Before Tax Profits as % of Sales	13.6	3.3	(13.3)	2.4	(4.2)
Manganese Alloys					
Sales ($000,000)	185	145	179	197	149
Profit - Before Tax ($000,000)	20	(1)	(17)	8	(5)
Profit - After Tax ($000,000)	12	(1)	(8)	4	(7)
Before Tax Profits as % of Sales	10.8	(.7)	(9.5)	4.1	(3.4)
Silicon Alloys & Metal					
Sales ($000,000)	367	367	412	501	452
Profit - Before Tax ($000,000)	30	9	(7)	19	3
Profit - After Tax ($000,000)	18	4	(4)	10	1
Before Tax Profits as % of Sales	8.2	2.5	(1.7)	3.8	.7
All					
Sales ($000,000)	693	663	718	862	791
Profit - Before Tax ($000,000)	69	11	(40)	32	(9)
Profit - After Tax ($000,000)	38	4	(24)	14	(16)
Before Tax Profits as % of Sales	9.9	1.7	(5.6)	3.7	(1.1)

Source: The Ferroalloys Association

CHART 1

Domestic Shipments - Imports - Market Share
of
Chromium, Manganese and Silicon Ferroalloys

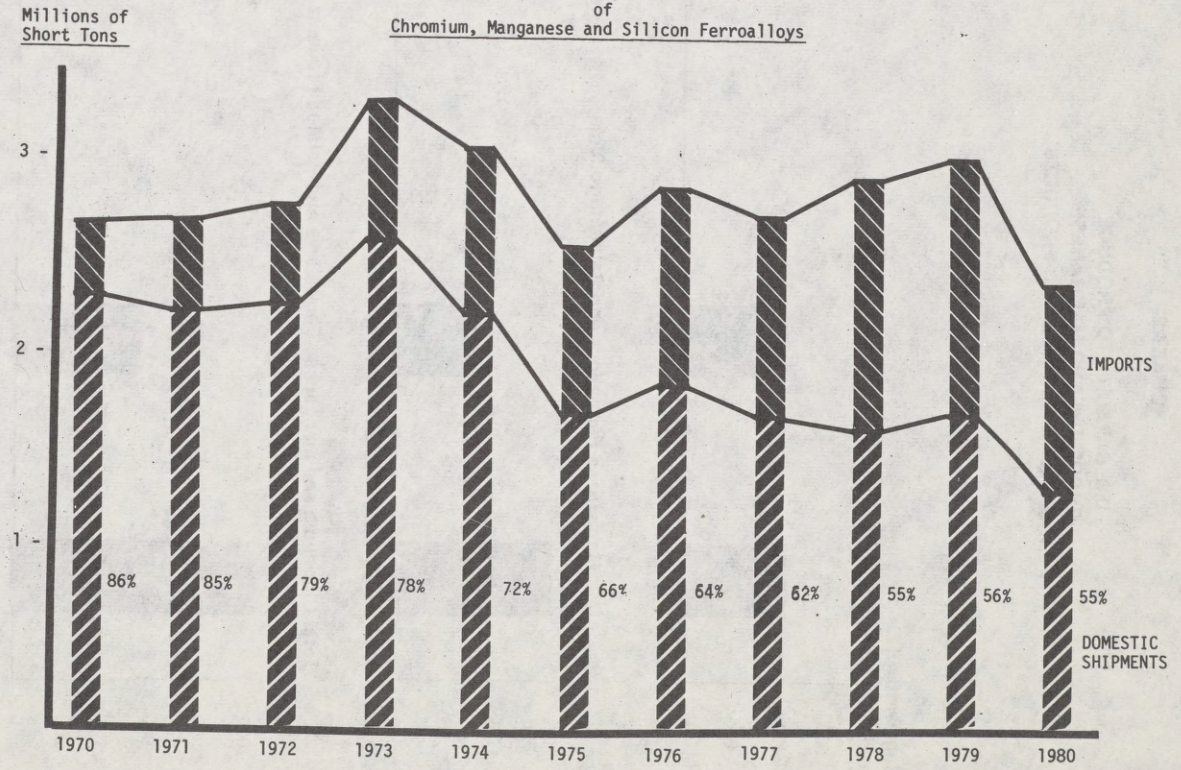
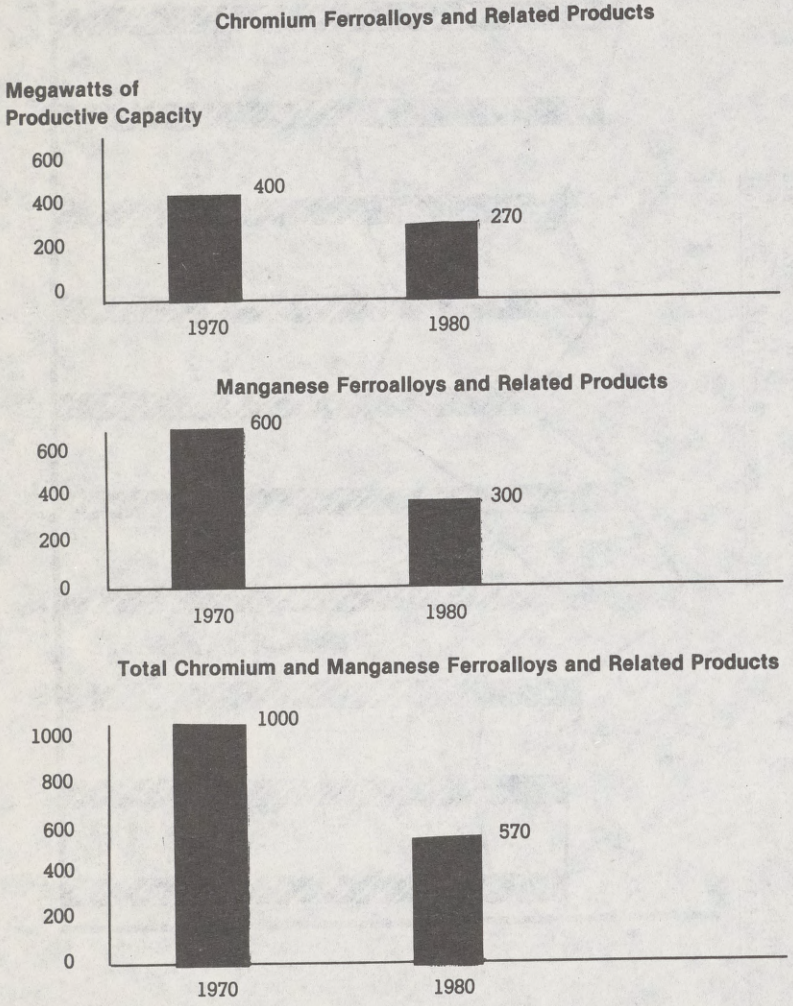


CHART 2

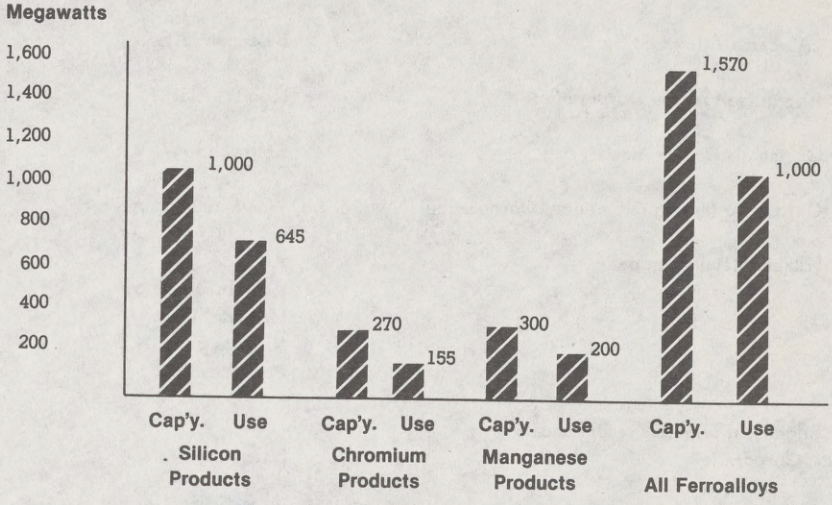
U.S. CAPACITY TO PRODUCE CHROMIUM AND MANGANESE FERROALLOYS AND RELATED PRODUCTS



Source: The Ferroalloys Association

CHART 3

Use of U.S. Ferroalloy Capacity
1980



Source: The Ferroalloys Association

Exhibit A

FERROALLOYS PRODUCERS IN THE UNITED STATES

COMMERCIAL PRODUCERS	LOCATION(S) OF PLANT(S)
*Alabama Alloy Co. Inc.	Bessemer, Ala.
Autlan Manganese Corporation	Mobile, Ala.
Chemetals Corporation	Kingwood, W. Va.
Chromium Mining & Smelting Corporation	Woodstock, Tenn.
*Elkem Metals Company	Alloy, W. Va. Ashtabula, Ohio Marietta, Ohio Niagara Falls, N.Y. Portland, Ore.
Engelhard Minerals & Chemicals Corporation	Strasburg, Va.
Foote Mineral Company	Cambridge, Ohio Graham, W. Va. Keokuk, Iowa New Johnsonville, Tenn.
Hanna Mining Company Silicon Division	Wenatchee, Wash.
Interlake Inc. Globe Metallurgical Division	Selma, Ala. Beverly, Ohio
International Minerals & Chemicals Corporation	Bridgeport, Ala. Kimball, Tenn.

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*A small producer not affiliated with this Statement.

**Elkem has agreed to purchase these facilities and will acquire them upon a closing expected to take place in the summer of the present year.

Kerr-McGee Chemical Company	Hamilton, Miss.
Macalloy Corporation	Charleston, S. Car.
Ohio Ferro-Alloys Corporation	Montgomery, Ala. Philo, Ohio Powhatan, Ohio
Roane Ltd.	Rockwood, Tenn.
Satralloy, Inc.	Steubenville, Ohio
Shieldalloy Corporation	Newfield, N.J.
SKW Alloys, Inc.	Calvert City, Ky. Niagara Falls, N.Y.

CAPTIVE PRODUCERS

Aluminum Company of America Northwest Alloys Inc.	Addy, Wash.
Dow Corning Chemical Corporation National Metallurgical Division	Springfield, Ore.
Hanna Nickel Company	Riddle, Ore.
Reynolds Metals Company	Sheffield, Ala.

Senator HUMPHREY. The subcommittee will stand in recess, subject to the call of the Chair.

[Thereupon at 12:25 p.m., the subcommittee adjourned to reconvene subject to the call of the Chair.]

STOCKPILE LEGISLATION

MONDAY, DECEMBER 14, 1981

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

PENDING STOCKPILE MATTERS

The subcommittee met at 10:14 a.m., pursuant to notice, in room 212, Russell Senate Office Building, Senator Gordon J. Humphrey, chairman, presiding.

Present: Senator Humphrey.

Staff present: James C. Smith, professional staff member; Paul C. Besozzi, minority counsel; and Marie Fabrizio Dickinson, staff assistant.

Also present: George Kohl, assistant to Senator Humphrey, and Jon Etherton, assistant to Senator Jepsen.

[The bill S. 1823 follows:]

[S. 1823, 97th Congress, 1st Session]

A BILL To amend the Omnibus Budget Reconciliation Act of 1981 and Strategic and Critical Materials Stock Piling Act, to assure an adequate supply of silver to the United States in times of national emergency and that excess supplies are disposed of in a manner that minimizes the potential for market disruptions while providing maximum revenues to acquire other stockpile materials that are in short supply

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "National Security Silver Assessment and Disposal Act of 1981".

FINDINGS

SEC. 2. The Congress finds that—

(1) the availability of silver is essential to the national security, economic well-being, and industrial production of the United States;

(2) the United States is not self-sufficient with regard to silver, and in times of a national emergency, foreign sources of supply may be needed to meet total industrial, military, and essential civilian needs;

(3) the United States is strongly interdependent with other nations through international trade which with respect to silver and stockpile disposals have the potential of causing adverse international repercussions,

(4) in terms of the amount of certain materials that are still needed in the strategic and critical materials stockpile is seriously deficient, and at the present rate of funding, it will be many years before the stockpile's goals are filled;

(5) the volatile nature of the international political climate frequently causes changes in military planning and that this in turn may cause changes in the assumptions upon which the stockpile's goals are based. Such changes influence the size of the stockpile and should be anticipated in decisions to sell the silver that is on hand;

(6) computation of stockpile goals relies heavily on estimates of silver production, making it imperative for stockpile planners to have reliable data on reserves, existing capacity, and leadtimes to add capacity for both domestic and foreign supply sources; and

(7) the sale of any excess silver in the stockpile in the form of legal tender coins could (a) realize hundreds of millions of dollars in additional revenue over existing competitive procedures and this additional revenue would be available to acquire other strategic and critical materials, (b) avoid undue disruptions of the usual silver producing, processing and consuming market, both domestic and foreign, and (c) better assure that the silver shall be made available to smaller investors and for domestic consumption.

DECLARATION OF POLICY

SEC. 3. (a) The Congress declares that it is the continuing policy of the United States to provide for the acquisition and retention of certain strategic and critical materials to preclude, when possible, a dangerous and costly dependence by the United States upon foreign sources for supplies in times of national emergency.

(b) In the event a material in the stockpile is found to be excess, the Congress reaffirms its policy of avoiding undue market disruptions in disposing of the excess material. At the same time, the Congress believes that methods of disposal should be explored which will provide maximum revenues for the National Defense Stockpile Transaction Fund to acquire other needed strategic and critical materials.

(c) The Congress further declares that any excess silver in the stockpile should be disposed of in a form and quantity that (1) can be afforded by and that is readily available to a large number of United States citizens, and (2) will be used primarily for domestic consumption instead of displacing silver already in the world market.

AMENDMENTS TO SECTION 201 OF THE OMNIBUS BUDGET RECONCILIATION ACT OF 1981

SEC. 4. (a) Section 201(e) of the Omnibus Reconciliation Act of 1981 (Public Law 97-35) is amended to read as follows:

"(e) Except for disposal under the authority of subsections (a)(7), (b)(1), and (c)(1) made after the date of the enactment of the National Security Silver Assessment and Disposal Act of 1981, any disposal under the authority of subsection (a), (b), or (c) shall be carried out in accordance with the provisions of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98 et seq.). Disposals under the authority of subsections (a)(7), (b)(1), and (c)(1) after the date of the enactment of the National Security Silver Assessment and Disposal Act of 1981, shall be carried out under the provisions of subsection (f)(4) of this Act as amended.".

(b) Section 201(f) of the Omnibus Reconciliation Act of 1981 (Public Law 97-35) is amended to read as follows:

"(1) The authority contained in subsections (b)(1) and (c)(1) shall not become effective unless the President not later than September 1, 1982, determines that the silver authorized for disposal by such subsections is excess to the requirements of the stockpile as of that date. No disposals shall be made under the authority contained in subsection (a)(7) after the effective date of the enactment of the National Security Silver Assessment and Disposal Act of 1981, unless the President redetermines, not later than September 1, 1982, that the silver authorized for disposal by such subsection is excess to the requirements of the stockpile.

"(2) A determination by the President under paragraph (1) shall be based upon consideration of such factors as the President considers relevant, including the following factors:

"(A) The demand for silver to meet defense, essential civilian, basic industrial, and monetary requirements, taking into account the most recent 'Defense guidance' used by the Department of Defense in programming general purpose conventional forces as well as historical monetary uses of silver as a medium of payment to foreign workers and troops during times of national emergency.

"(B) The projected magnitude of the increase in production as well as the accuracy and reliability of the data used in projecting increases in both domestic and reliable foreign production capacity. taking into account the

leadtimes associated with expanding capacity and obtaining such requirements as the necessary labor, equipment, transportation, and energy.

"(C) The current reliability of supplies from foreign sources and the economic and security implications resulting from our dependence on these sources of supply in times of national emergency taking into account the probability of a supply disruption or sharp price increase and its impact on the United States economy or a national priority such as defense.

"(D) The need for silver in the stockpile during the next ten-year period taking into account long-term supply-and-demand projections of the Bureau of Mines, United States Department of the Interior.

"(3) If the President makes a determination as described in paragraph (1), he shall report to the Committees on Armed Services of the Senate and House of Representatives that he has made such a determination and shall include a detailed discussion and analysis of the factors set forth in paragraph (2) and other relevant factors.

"(4)(A) Pursuant to paragraph (1), should the President taking into account the factors specified in paragraph 2, find the silver to be excess to stockpile needs and not withstanding any other provision of law, the silver shall be disposed of by minting legal tender, bullion coins in such quantities as necessary to dispose of the excess silver.

"(B) The authority contained in subsection (f)(4)(A) shall not become effective until the Department of the Treasury, taking into consideration such pertinent factors as the fluctuating value of silver over time and importance of maximizing public demand, reports not later than three months after the date of enactment of the National Security Silver Assessment and Disposal Act of 1981, to the Committees on Armed Services and Banking, Housing, and Urban Affairs of the Senate and House of Representatives (i) the design that shall appear on each side of the coin, (ii) the size of the coin, (iii) the silver content and percentage of purity, (iv) the face of each coin that is to be minted and (v) the time frames and quantities to be sold. In compiling its report, the Department of the Treasury shall consult with representatives of the numismatic, investment, and precious metal commodities industries.

"(C) All coins minted pursuant to this section shall be exchanged at a price equal to the greater of (1) the face value of such coins; or (2) the amount calculated by the Secretary of the Treasury to include all costs of manufacture, plus a surcharge of not more than 20 per centum of such cost and shall be distributed to the public through establishing domestic previous metal dealers.

"(D) All proceeds from the coinage sale shall be deposited into the National Defense Stockpile Transaction Fund solely for the acquisition of strategic and critical materials under section 6(a) of the Strategic and Critical Materials Stock Piling Act, as amended (50 U.S.C. 98e).

"(E) The Comptroller General of the United States or any duly authorized representative, shall have access for purposes of monitoring, audit, and examination, to any books, records, papers, and documents of any Federal agency pertaining to the silver coinage program.".

AMENDMENTS TO SECTION 202 OF THE OMNIBUS BUDGET RECONCILIATION ACT OF 1981

SEC. 5. Section 202 of the Omnibus Reconciliation Act of 1981 (50 U.S.C. 98d note) is amended by inserting the following:

"(c) There are authorized to be appropriated such sums as may be necessary to carry out the provisions of section 201, subsection (f)(4). Such appropriations shall come solely from the National Defense Stockpile Transaction Fund established under section 9 of the Strategic and Critical Materials Stock Piling Act, as amended (50 U.S.C. 98h.)".

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning.

The purpose of this hearing is twofold, to examine S. 1823, the McClure bill with regard to silver, and to examine certain proposals by the administration with regard to other stockpile transactions.

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We will hear first from Senator McClure and then from a panel of administration witnesses, including representatives from FEMA, GSA, and the Department of State.

Our hearings will be open and I do not anticipate the need to go into classified information. We do not plan to call outside witnesses at this session. However, the record will be kept open for 5 days so that any interested party may submit information to be considered for inclusion in the public hearing record.

Senator McClure, it is a pleasure to have you before us this morning. My apologies for the delay. You are free to proceed as you wish.

STATEMENT OF HON. JAMES A. McCLURE, A U.S. SENATOR FROM THE STATE OF IDAHO

Senator McCLURE. Thank you very much, Mr. Chairman.

As is usually the case, we are all wearing several hats this morning. We are trying to determine what is going to happen to the Defense Appropriations Conference. I came from that preliminary meeting and I will return to that meeting.

Senator HUMPHREY. Dust to dust. [Laughter.]

Senator McCLURE. Almost that fundamental I think.

Mr. Chairman, I thank you for the opportunity to appear today and for your attention and concern about this matter of the strategic and critical materials stockpile.

In the 6 months since I last spoke to the subcommittee on the issues of my stockpile legislation and the administration's requested legislation for authority to sell 139 million ounces of silver from the national stockpile, many events have taken place. Before I review these events let me first backtrack on the problems I maintain are plaguing our national stockpile.

There is no doubt in my mind that the strategic and critical materials stockpile is still vulnerable to misuse by the administration and the Congress. Past history has proven that the national stockpile has been used primarily for budgetary and economic purposes and that has not yet stopped. Congress has not resolved this critical problem and I for one will not give up.

When I testified before this subcommittee on June 19, I commented on the action taken by the House Committee on Armed Services which in its version of the Omnibus Reconcilation Act of 1981 included authority to sell 105 million ounces of silver from the national stockpile.

While I welcomed the Senate Committee on Armed Services' neutral stance on the administration's request, the action by both the House and Senate committees was disturbing. That action taken in the haste of that difficult, even frantic legislative period of time was unreasonable and certainly not logical in formulation of national policy. It was an economic and budgetary action which has no place in consideration of the national stockpile.

The overriding desire to raise revenue which has afflicted the Office of Management and Budget and apparently the administration and Members of Congress is a case of tunnel vision. I am afraid that unless we take action to insure a more cautious and careful consideration of the decision to sell silver and all its implications that case of tunnel

vision may in fact prove to be detrimental to our Nation's best interests.

Earlier this year in my capacity as chairman of the Senate Committee on Energy and Natural Resources, I requested that the General Accounting Office undertake a study of the issue of stockpile silver. That indepth study is scheduled for release early in January 1982. However, preliminary results of the study are damning to the silver sale, to the method of disposal being used and to the criteria on which the sale is justified.

GAO's efforts to date have identified demand for silver during periods of national emergency that have not been considered. It has identified uncertainties relating to the availability of both domestic and foreign supplies that have not been addressed and have found that the data used to support the zeroing of the silver stockpile extremely soft. It has also found that the war scenario upon which the stockpile goals are established is being reevaluated due to the assassination of President Sadat.

GAO has raised serious questions regarding the method of disposal and whether or not the U.S. Government is getting the best deal for the taxpayer. The sale has raised the ire of major foreign suppliers, including Peru, Mexico, and Canada, all of whom have protested to the U.S. State Department.

In a meeting I had recently with the Ambassadors of Peru and Mexico, opposition by these Governments to the silver sales were reiterated. In fact, on December 9, the Wall Street Journal reported that Peru has called for consultations within the general agreement on tariffs and trade on the sale.

This action taken is appropriate under the rules of GATT which provides for bilateral talks if the economy of one member nation that depends on a limited number of exports is threatened by the actions of a trading partner. The United States is being careless in its assumptions of foreign relations, our domestic market reaction and anticipated revenues.

On October 14 the Government began offering for sale silver from the national stockpile on a competitive basis. It anticipated a maximum sale of 1¼ million ounces of silver with minimum awards of 8,000 ounces. Table 1 presents the results of these sales.

TABLE 1.—RESULTS OF THE GENERAL SERVICES ADMINISTRATION SILVER STOCKPILE SALES

Date	Silver sold (ounces)	Average price (per ounce)
Oct. 14	160,000	$9.38
Oct. 21	224,000	8.97
Oct. 28	488,000	8.96
Nov. 4	1,128,000	9.05
Nov. 12	[1]	
Nov. 18	[1]	
Nov. 25	[2]	
Dec. 2	[1]	
Dec. 9	[1]	
Total	2,000,000	

[1] No acceptable bids.
[2] Government shutdown.

As you can see, the administration is not achieving its goal. In 9 weeks of sales the General Services Administration has sold only 2 million ounces of silver instead of the 1¼ million ounces it expected to sell per week or a total of 11¼ million ounces over the 9-week period.

For the past 4 weeks of sale offerings GSA has received unacceptable bids and thus no awards were given. For the week of November 25, no sales were offered due to the Government shutdown.

The Government is again doing what it has done so often before, selling stockpile at low prices. In awards granted the average sale price has ranged from $8.96 to $9.38 per ounce. In January 1981, before the intention to sell silver was announced, the average monthly silver price, according to Handy & Harmon, was $14.75.

Since that time the average monthly price has declined to $8.54 per ounce in November. In historical comparison to gold prices, a ratio of 35 ounces of silver to 1 ounce of gold has been documented. Today that ratio is 51 ounces of silver to 1 ounce of gold.

The current attempt of the administration to dump 46 million ounces of silver during fiscal year 1982 on the domestic bullion market is not at all helping silver prices. This action is depressing silver prices.

Let me give you some recent history of the market prices in conjunction to congressional and administrative actions. When the House Armed Services Subcommittee refused to authorize the sale of silver the market responded with a silver price of $10.50. Shortly after that the full Committee on Armed Services of the House reversed the subcommitte's action and the market price for silver dropped to $8.50.

During the third week of September, just prior to GSA announcing its first sale date, silver prices were at $11.50. By the end of the week GSA announced October 14 as the first day of sales and the price of silver dropped to $8.75.

The market is being affected and the administration's notification to both the House and Senate Armed Services Committees to offer the silver to foreign sources will have the same effect. An oversupply of silver on either the domestic or international market will depress silver prices.

In my firm opposition to the administration's ill-founded policy to sell silver, I ask you to question this action as well as the logic of the present method of disposal. The administration's actions are a detriment to our national security needs and to our own domestic silver mining industries. I have not and will not support such action.

Beginning my testimony today I stated that I would review events regarding the stockpiled silver which have occurred in the past 6 months. In consideration of time I will try to be brief.

During Senate consideration of the Omnibus Reconciliation Act of 1981, the Senate accepted an amendment to stop the sale of silver after September 30, 1982, unless the President in reassessment of silver stockpile goals found silver to be in excess. A tough set of criteria was included which the President must consider in his reassessment.

Shortly after congressional approval of the Omnibus Reconciliation Act, I requested the General Accounting Office to study the ef-

fects and consequences of the Government's proposed silver sale. As I mentioned earlier, this study is due in early January 1982.

On November 6 I introduced with Senator Symms two pieces of legislation designed to stop the silver sale from having an adverse effect on the silver bullion market. Both call for the immediate halt to the sale of silver.

Before the Senate Armed Services Committee today is one of those pieces of legislation, S. 1823, which requires the President to reevaluate the need for a silver stockpile goal.

If the President determines that the silver stockpile should still be disposed of the method should be in the form of coins. A particular coinage program to be initiated would be outlined by the Department of Treasury in a report due in 3 months after the enactment of the legislation. The other legislation, S. 1822, which outlined a specific coinage program was referred to the Senate Banking Committee.

As you know, on December 3, the Senate amended the Defense appropriations bill with language which stops the sale of silver for a period of 6 months. During this time adequate consideration can be given to the results of the GAO report and other relevant factors overlooked earlier.

When these factors are duly considered and should the President still believe the silver in question is in excess of stockpile needs and should be disposed of, adequate thought and consideration can be given to alternative methods of disposal.

The administration had earlier decided that the best way to dispose of the silver was to sell it on the bullion market, but I am convinced there are better, less disruptive, and more profitable ways of carrying out the disposal.

Just the other day I met with the President on this amendment. The President, Treasury Secretary Don Regan, and White House Chief of Staff, Jim Baker, stated that they would reassess the administration's policy of selling silver from the national stockpile. Each expressed concern over the instability of the silver market and the evident damage being done. It is time for all of us to take a careful look at what is happening and take enough time to carefully assess the next steps, but stop the sales until then.

Mr. Chairman, this concludes my testimony. I will be glad to answer any questions you may have and I do thank you.

Senator HUMPHREY. Thank you, Senator McClure.

Are you opposed to the sale from the stockpile on any basis or just the means by which it is being carried out today?

Senator MCCLURE. I think there could be some reduction in the stockpile, but I think to reduce the stockpile to having a goal of zero is ridiculous. If we just look at domestic consumption as contrasted to domestic production we would see that there is an imbalance and that there ought to be some silver left in the stockpile. I believe those needs have not been correctly assessed in coming to the determination that there is no need for any silver in the stockpile.

I would have to say that there are only two groups that I know of that really support the sale of silver today and push for the sale of silver. They are those who consume the silver and like a low price and the other, is the Office of Management and Budget that wants some

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money in for the revenue effects. Both are economic goals totally unrelated to the security reason for the maintenance of the stockpile.

Senator HUMPHREY. You made that point in your testimony that history has shown the stockpile, not only in this instance but in others, has historically and habitually been used for budgetary and economic purposes. But isn't that against statute?

Senator MCCLURE. It is, but it doesn't keep it from being done.

Senator HUMPHREY. Yes; that is obvious I think to everyone.

Assuming that the study due in January indicates that some silver should be sold, are you in agreement with the administration that it should also be sold on the international market and not just domestically?

Senator MCCLURE. I have ambivalence on that question. Well, let me put it a little more directly than that, Mr. Chairman. There isn't any way of insulating the sale from the international market. It is a fungible market. Whether you sell within this country and they simply transfer to the international market or whether they simply reduce their purchases on the international market, all you do is establish a slight barrier to that movement, a slight artificiality to that movement and I don't think it has a very great insulating effect.

Now if OMB's reasons are right, to get money for the Treasury, they ought to welcome foreign sales. If the silver user's reason for wanting the sale are correct, they would want to restrict it to domestic sales. So whose policy does it serve?

Senator HUMPHREY. What about this matter of coinage? What are the advantages in using whatever excess there might be in the stockpile for coinage instead of selling it on the open market?

Senator MCCLURE. Well, there is a very active market for collectors of Government issue coinage and that has been demonstrated repeatedly over history and is being demonstrated right now in the coin markets of this world and there is a better markup for the product. You simply get a better price by doing that because it has a different value than just the content of the silver.

It should not be too far above the price of silver, however, or you begin to lose some part of that market which is also those people who wish to hold coinage for their intrinsic value.

Senator HUMPHREY. I have heard it said that in the event of conflict of war when new uses of silver or perhaps old uses of silver have been rediscovered that it would be more useful to the Government to have that silver in coins which could be recalled or repurchased rather than having the silver used for silverware or industrial products.

Would you like to comment on that?

Senator MCCLURE. Well, certainly whenever you have a commodity held in the hands of private citizens, and certainly generally in a general coinage system, it is much more readily available. It constitutes a stockpile of sorts, a de facto stockpile that can be used.

If it is consumed it goes into industrial consumption which most of it, aside from the use for jewelry or silverware, are essential needs in industry today and would be in wartime. You can't say that that use in the shortrun is wasteful. I think in time of war there are those people who surrender their silverware if there is an industrial and a security need, too. So that is a stockpile of sorts, too.

Senator HUMPHREY. But certainly the industrially used silver would be very difficult to reclaim at that point.

Senator MCCLURE. Yes. Most of it is used in very, very small quantities and reclaiming it becomes economically inefficient.

Senator HUMPHREY. You have made the point that the sale of silver by GSA has disrupted the silver market in this country. Yet David Stockman, in a letter to Senator Tower states in making his point that the silver sales have not disrupted the domestic market.

He says:

> While the price of silver has fallen to a price level ranging between $8 and $9 an ounce, the price of most other metals has also exerienced a similar decline. The price of silver remains well above peak prices during most of the 1970's. For example, the daily price, as reported by Handy and Harmen, from 1972 to 1978 never exceeded $7 an ounce.

Senator MCCLURE. Well, there isn't any doubt that we are in a worldwide metals slump and that metals generally have declined. But there is also no doubt, as I correlated in my testimony, of events that took place with respect to the decisions to sell or not to sell that was immediately reflected in the bullion market.

It is impossible to dump on the market 46 million ounces of silver per year, a potential of over 100 million ounces of silver of a period of 2 or 3 years at the maximum, against a domestic production figure that is scarcely twice that and a domestic consumption figure that is about three times that.

I don't care what the commodity is, if the Government has a great amount of it and it is out there hanging over the market as being available to the market, it is going to depress the price and the minute you start in selling the price is going to go down. It is simply too large an interference in the market to be absolutely without effect upon the market.

Let me say for the GSA, I think they have acted as responsibly as they could under the circumstances. I have no quarrel with GSA, with one possible exception, the 8,000 ounce minimum which they have required, together with the end use certificate that they have required limits it to a certain class of domestic only consumers which are very identifiable. I would hope at least that they would drop that requirement as indeed they have now with respect to the domestic sale. The end use certificate question was something that was then drafted by the Congress and not simply the idea of the GSA.

Mr. Chairman, I wouldn't want to depart from the notion and leave somehow on the record the idea that the silver users are not friends of the producers. They are. They provide the market. They are friends of ours and they have been for years. They have been the purchasers and without them we wouldn't have the markets that the

produces do have. But it is a question of how much of a benefit they are entitled to get and at whose expense.

Senator HUMPHREY. Going back to your bill, will you touch on the advantages of your bill over outright sales of silver. I think you have done that to some extent, but I just want to run through these questions that pertain to your bill.

Senator MCCLURE. Well, if we establish a coinage program, then you can by the means of the coinage provide a market which does two things, it seems to me.

One, is it disrupts the market less because the bullion is not dumped into the market in the same kind of a form and, second, it does the other economic thing which apparently is the reason for disposal in the first place and that is to enhance the recovery of money for the Treasury of the United States.

I would hope sometime we go beyond this, Mr. Chairman, and we get some stockpile legislation on the books that insulates the stockpile from the subjective evaluations that have plagued it ever since we started.

Senator HUMPHREY. Yes.

Senator MCCLURE. It is interesting to plot the sales. The Government seems to do what Government always does, it buys high and sells low.

Senator HUMPHREY. Do you have any particular bills in mind?

Senator MCCLURE. Yes, as a matter of fact. [Laughter.]

Senator HUMPHREY. Going back to S. 1823, is that the correct bill number?

Senator MCCLURE. Yes, sir.

Senator HUMPHREY. What are the budgetary implications of your bill?

Senator MCCLURE. Depending upon the timing that is involved, Mr. Chairman, and I have to be candid about that, if I look at it over a period of time there is no question in my mind that whatever silver would be disposed of would enhance the recovery to the Treasury. There would be a greater net profit on sale under the bill.

Now when I say timing, it depends upon when the decision is made and during which fiscal years the coins would actually reach the market.

Senator HUMPHREY. You have discussed your bill with the administration I assume. What is their position?

Senator MCCLURE. Treasury has in recent years not been very enthusiastic about including coinage of intrinsic value nor have they wanted paper currency backed with either silver or gold. So they are not really enthusiastic about the idea of putting out coins.

Just last week, however, the Congress did pass the George Washington Memorial Commemorative Coinage Act. Again, Treasury wasn't anxious to get into the business of minting silver coins again. Incidentally, that is a very small issue and would amount to a total of about 4 million ounces of silver in total.

The OMB is cautious. I talked to Mr. Stockman about stopping the silver sale to allow us to look at the alternatives. He said he would be glad to look at the alternatives because if, as a matter of fact, there is

something that could be done that will yield a greater return, he is interested in that as he should be from that single perspective.

The President has indicated to me in his private conversations that he is not anxious to sell off our stocks of silver or gold, and I think you would know, Mr. Chairman, that that is consistent with his general approach to matters of Government. I think we would expect that this President would not be anxious to sell, but he is not opposed to a coinage program.

Senator HUMPHREY. The Treasury is not anxious to circulate currency or coinage that are denominated in dollars or some fraction apparently. Have you considered silver coins that are simply denominated by weight and purity so they wouldn't be circulated like ordinary currency. Would that overcome the Treasury's problem?

Senator MCCLURE. I don't have a reaction from Treasury. I have considered that. It is, I think, worth noting that South Africa, Mexico, and Canada are doing exactly that with respect to the gold coins that those countries are producing and putting on the market. Canada is also doing it with respect to silver coinage.

I would hope that we would move in that direction. I think it could work. I would think that there would be a great deal of interest in both numismatic and in monetary circles on the opportunity to find something that had the stamp of U.S. Government on it in effect by putting out a precious metal in a coin that they could then hold. It also provides a floor of value with respect to that coinage issuance. If it has been denominated by weight this is not exactly the same kind of a floor as it is if it is denominated in face value.

I am not certain what the market response would be and I am not certain what the Treasury response would be, but I think it is well worth trying.

Senator HUMPHREY. Have you seen the Stockman letter to which I referred earlier?

Senator MCCLURE. Yes, I have.

Senator HUMPHREY. Would you care to comment further on his letter?

Senator MCCLURE. Well, Mr. Stockman is doing what Directors of OMB do. They have a signature machine down there too, and I am not sure how much of this letter he has seen. I know he has not had a chance to talk to the President about it since I talked to the President. That is not the first time they have been out of sync downtown.

I see no damage to the goals of OMB in suspending the sales. As a matter of fact, after 9 weeks of sales, instead of selling 11¼ million ounces of silver they have sold 2 million. In the last 5 weeks they have sold none. Their actions together with other market factors has reduced the price to the point they aren't selling any. There is no loss of revenue to the Treasury if you are not selling any.

It seems to me that it makes some sense to suspend the sales and look at these other factors while determining whether or not there are other actions that ought to be taken. As to whether or not the factors have been sufficiently studied, I have never seen an administration yet that didn't think GAO was wrong whenever GAO criticized something the administration has done.

So I think that much of this is boilerplate that somebody pulled out of the mechanical memories of the typing marvels that OMB has and affixed a signature to it and sent it up here as a matter of route. I say that knowing that Mr. Stockman doesn't agree with my amendment. I have spoken to him about it.

But his immediate response, Mr. Chairman, was exactly what you would expect it to be: I can't support that amendment. We are expecting to get hundreds of millions of dollars of revenue.

Again, Mr. Chairman, the Stockpile Act says you cannot use the stockpile purchases or disposals for economic reasons.

Senator HUMPHREY. I am sure he meant that was just a side benefit.

Senator MCCLURE. Yes, but the immediate reaction was upholding that.

Senator HUMPHREY. I think this would be an appropriate point to enter that letter in the record.

[The letter from Director Stockman to Chairman Tower follows:]

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF MANAGEMENT AND BUDGET,
Washington, D.C.

Hon. JOHN G. TOWER,
Chairman, Committee on Armed Services, U.S. Senate,
Washington, D.C.

DEAR JOHN: I wish to take strong exception to the approval of the McClure Amendment, U.P. No. 738, during the Senate floor consideration and approval of H.R. 4995—the Defense Appropriations Bill on December 3, 1981. This amendment would suspend the sale of excess silver from the National Defense Stockpile until the President:

Redetermines that the stockpile of silver is excess to meet defense needs during an emergency.

Considers other relevant factors, including a report of the General Accounting Office regarding the stockpile requirements for silver to be completed on or before January 1, 1982.

Reports to the Armed Services Committees if he finds that silver is excess to the needs of national defense, along with a discussion of alternate methods for its disposal.

The amendment also requires that the Congress approve the method of disposal before silver sales could resume.

These issues have already been examined previously, and the reopening of this matter would serve little purpose except to delay these sales and the associated receipts, which are needed to purchase strategic materials for our national security. These silver sales were authorized by the Omnibus Reconciliation Act of 1981. At that time, both the House and the Senate Armed Services Committees heard testimony on the matter before approving the sales.

The amendment raises again the question of whether this silver is needed in the stockpile for national security. I do not know what more can be said here, except that there is no strategic need in the stockpile for this silver. The Federal Emergency Management Agency has stated this fact and so has the Department of Defense. Silver has been excess for a number of years and has been proposed for sale not only by this Administration but also by the previous Administration. A recertification of this matter is certainly unnecessary at this point especially when such a recertification is required at the end of FY 1982 by the Omnibus Reconciliation Act of 1981.

The colloquy on this amendment implies that these stockpile sales may be responsible for the decline in the price of silver. These sales have been conducted in a responsible manner in order not to disrupt the market. GSA has sold only 23 percent of the amount offered at its weekly sales, and has often rejected all bids when the price was too low.

The price of silver is determined by many factors, including industrial and speculative demand, and the supply from mine production, secondary recovery, existing stocks and imports. The GSA stockpile sales have a relatively minor

effect on price as long as the sales are conducted in a prudent manner. While the price of silver has fallen to a price level ranging between $8.00 and $9.00 an ounce, the price of most other metals has also experienced a similar decline. The price of silver remains well above peak prices during most of the 1970's. For example, the daily price, as reported by Handy and Harmen, from 1972 to 1978 never exceeded $7.00 an ounce.

I wish to again state the Administration's opposition to this amendment and urge its removal from the bill before it is enacted.

Sincerely,

DAVID A. STOCKMAN,
Director.

Senator HUMPHREY. Unless you have further comments, Senator McClure, thank you very much for your testimony.

Senator MCCLURE. Thank you very much, Mr. Chairman. I appreciate the chance to be here this morning.

Senator HUMPHREY. Our pleasure.

Senator MCCLURE. Thank you.

Senator HUMPHREY. We will proceed to the panel now comprised of Mr. Paul K. Krueger, Assistant Associate Director, Resources Preparedness Office of the Federal Emergency Management Agency; Mr. Roy Markon, Commissioner of the Federal Property Resources Service, General Services Administration; and Mr. Michael Calingaert, Deputy Assistant Secretary of State for International Resources and Food Policy.

Good morning, gentlemen.

Mr. Markon, I understand you have a prepared statement. Will you proceed, please.

STATEMENT OF ROY MARKON, COMMISSIONER, FEDERAL PROPERTY RESOURCES SERVICE, GENERAL SERVICES ADMINISTRATION

Mr. MARKON. Yes, Mr. Chairman, I do.

I am Roy Markon, the Commissioner of the Federal Property Resources Service of the General Services Administration.

On behalf of Gerald Carmen, the Administrator, I appreciate the opportunity to appear today to testify to GSA's disposal programs for excess strategic and critical materials.

I am also here to review the status of two key disposal programs and discuss a recent notification sent to Congress concerning the priority acquisition of bauxite for the national defense stockpile.

With your permission, Mr. Chairman, I would like to introduce my statement for the record to conserve time and summarize the remarks.

Senator HUMPHREY. Yes.

Mr. MARKON. Basically we are talking about three commodities. The most controversial, the one that has had the most discussion is the sale of the silver.

To put it in proper perspective, one must look at the stockpile totally. Based on recent estimates we have in excess about $4½ billion in commodities that are excess to stockpile requirements. The sale of these commodities would provide the wherewithal to finance future acquistions.

Currently we have authorized to sell commodities which would bring in about $1.9 billion. Of this total about $0.84 billion, or nearly

44 percent represents the value of the silver in the stockpile. The value of tin is also a large amount. It is approximately 60 percent of that total.

So if you are going to fund the stockpile from the receipts of the sale of excess, you are looking basically at those two commodities as the major income producers. A suspension of the sale of either of those two commodities would limit or stop the cash flow into the transaction fund and there would be no moneys from which to appropriate funds for future acquisitions.

Our silver sale did start on October 14 as testified by Senator McClure and we did sell 2 million troy ounces out of 10 million offered.

Now this is a matter of judgment with the General Services Administration. We make awards where we feel that the prices are within the range of the market. For us to make awards when the prices are considerably low for what we consider to be the market for that particular day would be undue disruption of the market. So this is a deliberate judgment and deliberate action on the part of the stockpile managers to make these decisions to cause a minimal amount of disruption in the market.

We have written to the committee and advised them of our determination that to restrict the sale of silver to domestic consumption is not feasible. I think everyone agrees with that. The Senator testified that it was not feasible and I don't believe that we would have any objection from any source.

I met with the Silver Users Association and my recollection of that meeting was that they had no objection to the removal of that restriction.

In regards to tin, tin is very similar in its market. It is an international market. It is fungible. For us to continue to restrict the sale of tin to domestic consumption merely limits our ability to sell the tin. We have authorization to sell 30,000 metric tons of tin. We have sold approximately 1 percent of that, 3,000 tons of tin. The tin market is very soft and we feel that the removal of this restriction will put us competitively in a world market and should go a long way to help us reach our objective.

By the way, we are a member of the International Tin Agreement, and under the terms of that agreement it was necessary for us to coordinate or have consultation with the International Tin Council immediately after the authorization was received from the Congress.

In January of 1980, I, with the State Department, entered into this consultation process. The major concern was the amount of tin that we were going to put into the market. We told the Council that we would limit ourselves to 10,000 tons which is a small fraction of the 200,000 ton world consumption. We feel that to stay within this amount, regardless of the method or procedure we use, would not be disruptive of the market.

Also, in the authorization we were authorized to transfer 5,000 tons of tin to the buffer stock of the ITC. After lengthy negotiation the Special Trade Representative had made final arrangements and the ITC agreed to take 1,500 tons. This tin still remains in the inventory subject to call by the ITC buffer stock manager. Recently we received

a request to ship 300 tons and we await further orders for the rest of it.

The other commodity we wish to talk about today, which is also mentioned in the letter I sent to the committee, is the purchase of metallurgical or Jamaican type bauxite.

There is an urgency with this acquisition. The President after many months of study had directed that we enter into country-to-country negotiations with Jamaica to buy 1.6 million dry tons of this commodity. This acquisition will be a mixture of processes or procedures, part of it will be by cash, part of it by agricultural barter, and part of it by exchange of commodities.

In the exchange of commodities the Jamaicans have not expressed any particular interest in any of the commodities that we have for disposal, but there appears to be a strong interest in the acquisition of tin on behalf of the Jamaicans.

We would appreciate very much receiving the committee's views on this bauxite purchase. I have received a letter from the Armed Services Committee of the House of Representatives waiving the 30-day requirement which is most helpful for our purposes, and I have also received a letter from the committee indicating that they have no objection to the removal of the domestic consumption restriction on the sales of tin and silver.

[The prepared statement of Roy Markon follows:]

PREPARED STATEMENT OF ROY MARKON

Mr. Chairman and members of the Subcommittee, I am Roy Markon, Commissioner of the Federal Property Resources Service in the General Services Administration (GSA). On behalf of Gerald Carmen, the Administrator, I appreciate the opportunity to appear today to testify to GSA's disposal programs for excess strategic and critical materials. I am also here to review the status of two key disposal programs and discuss the recent notification sent to the Committee concerning the priority acquisition of bauxite for the National Defense Stockpile.

Based on the authorities provided in the Stock Piling Act of 1979 and Executive Order 12155 the General Services Administration functions as the stockpile manager authorized to sell and buy strategic and critical materials to restructure the stockpile in order to improve its industrial readiness posture for future national emergencies.

At this time this Nation continues to face a large gap in inventories that if allowed to persist will jeopardize our ability to support emergency defense efforts. Total material requirements identified by stockpile planners approximate $20 billion for a planned 3 years contingency. Only about $8 billion of current inventories meet program requirements, leaving a deficit of $12 billion that must be acquired to meet current goals.

Based on recent estimates we have excess of about $4.5 billion worth of materials that could be sold to finance acquisitions. Currently, GSA has an estimated $1.9 billion in materials authorized for sale. Of this total $.84 billion or nearly 44 percent is accounted for by the silver authorized for disposal in Public Law 97-35, the Omnibus Budget Reconciliation Act of 1981.

Mr. Chairman and members of the subcommittee, it is apparent that silver is an important part of the administration's efforts to promote the rebuilding of the National Defense Stockpile. For this reason the administration is opposed to the Senate amendment of the Defense Appropriation Act that would stop sales of excess silver.

Reults since the start of the silver sales on October 14, 1981, reflects sales awards of 2 million troy ounces out of 10 million offered. Awards were made in relationship to the markets under the competitive sealed bid provisions of our invitation to bid. To my knowledge general market comments about the conduct of the sales and the management judgments have been favorable.

To expand our sales potential we recently sent a notification to the Armed Services Committees of the House and Senate that sales of silver for domestic consumption only is not feasible and not in the best interests of the U.S. Silver is a fungible material in international trade and investment circles.

To continue use restrictions on the government's silver with no apparent benefit to domestic consumers, tends to reduce competition and influence bidding to the detriment of the government.

In regards to the setting of goals for silver and past testimony before this subcommittee in June, I can only state that the existing silver goal was established at zero in 1980 after a thorough review of the national emergency needs and a reevaluation of the previous 1976 zero goal. Any detailed queries on goal setting should be addressed to the Federal Emergency Management Agency (FEMA), which is responsible for developing the quantity and quality of the strategic and critical materials that constitute the National Defense Stockpile.

Tin is another key program item for the stockpile. Congress authorized the disposal 35,000 tons of excess tin in 1979 by Public Law 96–175.

It was our intention to sell some 10,000 metric tons of the excess tin each year and to contribute up to 5,000 tons of tin to the International Tin Council (ITC) buffer stock under the Fifth International Tin Agreement. Recently, the Office of the Special Trade Representative made final arrangements to transfer 1,500 tons of tin from GSA inventory. Under the arrangement the tin remains in GSA storage depots until shipping orders are received from the ITC buffer stock manager. We recently shipped 300 tons and await further orders as to the remaining 1,200 tons.

The 10,000 tons sales objective was discussed with other government agencies and consultations regarding the GSA sales were held with the ITC in January and February of 1980.

Sales began on July 1, 1980, with a bi-weekly offering of 500 metric tons. Under this sales procedure we managed to sell only 5 tons through October 1980. With practically no sales we changed the sales procedure to sell tin on a daily basis, which is a common industry practice.

Results have improved since December 1980 when we began the daily, fixed-price off-the-shelf sales. To date we have sold some 3,200 tons which is still short of our planned objective of 10,000 tons per year.

Recently we notified Congress of our determination that the domestic use only restriction for tin is not practical. Removal of the constraint will permit free movement of excess government material and assist us in attaining our sales objectives. It will also improve our market potential as tin is a fungible materials with an international market.

There is sufficient excess tin to adequately serve the domestic market while permitting some movement into the international market place.

Tin represents the largest single excess commodity we could sell to restructure the stockpile. With 155,000 tons in excess to current goals valued at $2.6 billion (out of the $4.5 billion total excess), some 30,000 tons currently valued at more the $500 million are available for sale.

The last stockpile issue I would like to discuss concerns the high priority acquisition for metallurgical grade bauxite the GSA was directed to acquire by President Reagan on November 24, 1981. To maximize the benefits of the acquisition and to further our foreign policy objectives the President directed GSA to negotiate a government to government agreement. We will acquire a total of 1.6 million long dry tons (LDT) of stockpile grade metallurgical bauxite by a cash purchase, barter of surplus agricultural products for 400,000 LDT and an exchange of other excess materials authorized for disposal. The cash transaction will not exceed 35 percent of the fiscal year 1982 appropriation for stockpile acquisitions.

On December 4, 1981, I notified the Senate and the House Armed Services Committees of GSA's intention to proceed in such a manner.

If there are no objections by the committees, we in conjunction with the Department of Agriculture will immediately negotiate the acquisition of 1.6 million tons of Jamaican bauxite enabling us to meet nearly 50 percent of our 3 year contingency needs.

Mr. Chairman and members of the Subcommittee this important transaction would begin as expeditiously as possible if the committee could indicate at its earliest convenience that there are no objections to proceeding with these nego-

tiations. Such an effort would make a substantial contribution to the President's objectives.

At this time I would be pleased to answer any questions you or the members may have.

Senator HUMPHREY. Before we begin questioning, I would invite Mr. Krueger and Mr. Calingaert to offer any comments they might care to at this point.

STATEMENT OF PAUL KRUEGER, ASSISTANT ASSOCIATE DIRECTOR, RESOURCES PREPAREDNESS OFFICE, FEDERAL EMERGENCY MANAGEMENT AGENCY

Mr. KRUEGER. Mr. Chairman, I would just like to make a couple of comments particularly with regard to silver.

I think the simplest thing to say is that the same criteria, assumptions, and all of the other things that go into calculating stockpile goals are applied consistently and uniformly against all the materials in the stockpile. The same procedures and methods which establish our goals for cobalt are used to establish the goals for silver.

There are no special procedures taken for budgetary purposes or for economic purposes. These determinations are made strictly on national security criteria.

Beyond that I would not have any other remarks.

Senator HUMPHREY. I would like to ask a few questions about that at an appropriate time.

Mr. Calingaert, do you have any comments at this point?

STATEMENT OF MICHAEL CALINGAERT, DEPUTY ASSISTANT SECRETARY FOR INTERNATIONAL RESOURCES AND FOOD POLICY

Mr. CALINGAERT. Thank you, Mr. Chairman.

I would like to make a couple of comments about the role of the Department of State in the issues affecting strategic planning and emergency preparedness.

The first one is that, generally, through the conduct of our foreign relations we try to present a posture of national strength and avoid any kind of circumstance where we would have to draw upon the materials in the stockpile. Access to supply is an important goal of foreign policy. We relate to that by maintaining open international trade, strengthening relations with key-producing countries and the like.

Second, we participate along with the other agencies in issues involving the stockpile. We assess for FEMA international political and economic impacts of proposed stockpile acquisitions and disposals. We monitor the world market situation. We consult frequently with the GSA about their activities to help them avoid, to the extent possible, undue disruption of the market.

We also collect the major part of the U.S. Government's information about overseas minerals activities through a program of regional resource attachés, which we conduct in close cooperation with the Bureau of Mines and the Geological Survey.

Finally, some of the minerals involved are the subject of international commodity agreements. The Department has been one of the main agencies, both in developing policies relating to them and in representing the United States at those meetings.

That is all for the moment.

Senator HUMPHREY. Thank you, Mr. Secretary.

Mr. Markon, the matter of the bauxite agreement does not seem to be controversial, so I don't intend to dwell on that.

Mr. MARKON. Mr. Chairman, the law requires that we notify the committee of our determination to waive the competitive requirement and make no commitment for 30 days.

Senator HUMPHREY. Yes.

Mr. MARKON. I have written a letter. I believe it was dated December 4.

Senator HUMPHREY. Yes.

Mr. MARKON. We would appreciate very much a waiver of that so that we can enter into an agreement, hopefully before the end of the year.

Senator HUMPHREY. I understand. I am sure that will be forthcoming. Will you tell us why bauxite has such a high priority at this time.

Mr. MARKON. The priorities are determined by the Federal Emergency Management Agency and I will defer to Mr. Krueger for that answer.

Senator HUMPHREY. All right. Mr. Krueger.

Mr. KRUEGER. The basic reason for establishing priorities is that we have a very large menu or shopping list. On March 13 of last year when the President announced his intention to resume acquiring materials for the stockpile, bauxite was one of those materials mentioned as a highest priority item.

As you probably know, bauxite is the only one that is used on any commercial basis to make aluminum. The requirements for aluminum are extensive during any mobilization period or wartime period, particularly in the aerospace industry, but it also enters into a number of other weapon systems, in armored personnel carriers, and in submarines.

We found at this particular time there was a confluence of events, and it made sense to the President to step out on this deal because he could not only strengthen the domestic side of our national security by adding materials to the stockpile but also strengthen the foreign aspects of our national security.

In addition to that, the Congress in the Stockpile Act instructs the President to encourage barter, and this seemed to be a time that that could take place as well.

Senator HUMPHREY. You implied that there are other considerations here besides the stockpile consideration. Apparently there are some foreign relations considerations here. Those aren't really the responsibility of this committee.

I want to be sure that this bauxite agreement is being pursued on the basis of some sort of priority system used within FEMA with respect to the stockpile.

Explain that priority system, will you, by which you assign priorities and how bauxite happens to rank as a priority item at this time from strictly the stockpile view.

Mr. KRUEGER. To give a full exposition would require going into closed session. If we do not have sufficient materials in the stockpile inventory, we would give priority to acquiring those materials where we expect to see early shortages during wartime. We would want to acquire those materials with deficits.

In the case of bauxite we have a 13-million-ton deficit. Of that 13 million tons, 12 million tons represent Jamaican-type bauxite.

Senator HUMPHREY. How long has that shortfall existed?

Mr. KRUEGER. The current goals were established in May of 1980, so you could say from May of 1980.

Senator HUMPHREY. Why has nothing been done until now, or has there been something done?

Mr. KRUEGER. Part of the problem was that Congress did not appropriate the money necessary to start a stockpile program or to restart a stockpile program. The Congress appropriated $100 million last year. We made some initial purchases of high priority materials selected from that list published in March. We are just continuing purchases and acquisitions on that same list.

Senator HUMPHREY. I will enter into the record at this time a letter date December 4, 1981, from Mr. Markon to Senator Tower previously alluded to, and a letter dated December 9, 1981, to Commissioner Markon from Chairman Price of the Committee on Armed Services, House of Representatives.

[The letters follow:]

GENERAL SERVICES ADMINISTRATION,
Washington, D.C., December 4, 1981.

Hon. JOHN G. TOWER,
Chairman, Armed Services Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The purpose of this letter is to provide notification to Congress under Subsection 6(d)(1) of the Strategic and Critical Materials Stock Piling Act of our proposed acquisition of metallurgical grade bauxite (Jamaican type).

Section 6(b) of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98 et seq.) states that to the maximum extent feasible—(1) competitive procedures shall be used in the acquisition . . . of such materials. Subsection 6(d)(1) authorized the President to waive such provisions whenever the President determines that the application of paragraph 6(b)(1) . . . of such section to a particular acquisition . . . is not feasible. Subsection 1–102 of Executive Order 12155 delegated to the Administrator of General Services the operational responsibility and the authority contained in Section 6 of the Stock Piling Act.

On November 24, 1981, President Reagan directed the Administrator of General Services to purchase 1.6 million LDT of metallurgical bauxite for the national defense stockpile which he has determined to be critically needed. His direction to the Administrator was combined with a direction to the Secretary of the Department of Agriculture to acquire an additional 400,000 LDT of Jamaican bauxite for the national defense stockpile by barter of surplus agricultural products. "While improving our own defense posture," Reagan said the purchase is important to the stability and economy of Jamaica.

Bauxite is among the commodities identified earlier by the President through the Federal Emergency Management Agency as a priority item for acquisition. The stockpile goal for metallurgical grade (Jamaican type) is 20,000,000 LDT and the current inventory is 8,858,881 LDT. Bauxite is a necessary raw material used to produce aluminum, a major element in almost all modern military weap-

ons systems such as the B–1 bomber and F–18 aircraft. It is a critical input to industries that are essential to support a mobilization effort.

To comply with the President's direction the General Services Administration is preparing to negotiate the acquisition of 1.2 million LDT of metallurgical bauxite from Jamaica utilizing, in part, funds to be available in our fiscal year 1982 appropriation and, in part, an exchange of excess stockpile commodities that are authorized for disposal. Our plan is to negotiate a cash purchase and exchange with the government of Jamaica in coordination with the agricultural barter. We have determined that the use of competitive procedures for the acquisition of the material is not feasible. The specifications of the material for stockpile purposes are such that the Jamaican type currently being produced in Jamaica is the best source for this material. Market analysis indicate a soft position in the sales of bauxite and it would be in the government's best interest to negotiate for this acquisition. The President directed a government-to-government transaction in order to maximize the benefits of the acquisition for foreign policy consideration. It is not feasible, nor in the government's best interest, to solicit competitive proposals from a single source of supply. In our negotiating with the Jamaican government we will insist that the material to be acquired be competitively priced so that the United States Government will not pay more for the material than we would under usual competitive solicitations.

There is an urgency associated with this acquisition. As provided in the Strategic and Critical Stock Piling Act, no obligation of the United States is incurred in connection with such acquisition until 30 days after your receipt of this letter. It would be very helpful and a substantial contribution to the achievement of the President's objective if the Armed Services Committee would indicate that there are no objections to proceeding with the negotiations on a sole source government-to-government basis at your earliest convenience.

Sincerely,

ROY MARKON,
Commissioner, Federal Property Resources Service.

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, D.C., December 9, 1981.

Mr. ROY MARKON,
Commissioner of Federal Property Resources Service, General Services Administration, Washington, D.C.

DEAR COMMISSIONER MARKON: This is in response to your letter of December 4, 1981 notifying the committee, as required under subsection 6(d)(1) of the Strategic and Critical Materials Stockpile Act as amended (50 U.S.C. 98 et. seq.) of the plan of GSA to acquire 1.6 million long dry tons of metallurgical grade bauxite from the Jamaican government for the National Defense Stockpile.

The committee understands that this acquisition will be accomplished using three different methods: direct cash purchase, exchange of excess materials from the stockpile and barter, using U.S. agricultural commodities. The direct cash purchase and the commodity exchange with excess materials from the stockpile will be handled by the General Services Administration and the barter program, using agricultural commodities, will be administered by the U.S. Department of Agriculture.

The Committee on Armed Services interposes no objection to this sole source, government-to-government purchase of metallurgical grade bauxite. The committee also understands the urgency of the transaction because of foreign policy considerations and, therefore, waive the thirty day requirement as stipulated in subsection 6(d)(1).

Sincerely,

MELVIN PRICE, *Chairman.*

Senator HUMPHREY. Mr. Calingaert, will you comment on the foreign policy aspect of this bauxite arrangement.

Mr. CALINGAERT. Yes. I think this is a case, as mentioned, where various interests of the United States came together rather neatly. The

administration is very anxious to give support to the recently elected Seaga government in Jamaica. They face severe economic problems and certainly their bauxite industry is important to them, as it accounts for about three-quarters of export earnings and substantial amounts of tax revenue. By making this purchase from them we are able to give some assistance to that sector of the economy.

Senator HUMPHREY. While we are on the subject of foreign relations, what about the matter of international sales of silver. Peru and one other country, as I recall, protested that possibly. What is your point of view on that?

Mr. CALINGAERT. As in the case of all the disposals before they are carried out and while we are considering a decision we consult with the major producing countries. We did that in the case of silver, and tin as well.

Senator HUMPHREY. Yes.

Mr. CALINGAERT. In the case of silver, the main producers are Canada, Mexico, and Peru. We did consult with them. We received their comments and there were varying degrees of concern expressed about the sale and the effect that the sales would have on the market.

We have taken those into account in making the decision on the method of carrying out the sale, and we have assured those countries that the sales would be carried out in a manner that would avoid undue effect upon the market. We have worked very closely with GSA in doing that.

Mr. MARKON. Mr. Chairman, if I may add to that.

Senator HUMPHREY. Yes.

Mr. MARKON. I was involved in the consultation process, meeting with the Ambassador from Peru. I don't believe there is any objection. I think everyone looks at the sales of silver as described by Senator McClure here earlier.

So whether or not you sell on the international market or restrict it to domestic merely makes it more difficult for GSA to sell silver. It is an unnecessary restraint that produces no benefit to the United States. It is a fungible product and it is traded on worldwide markets, and or trading it internationally or domestically is not really an issue in anyone's mind. It is whether or not we should be selling silver at all.

Senator HUMPHREY. Mr. Markon, have you seen the letter to Mr. Carmen from the Governor of Idaho?

Mr. MARKON. There were several letters.

Senator HUMPHREY. The one in which he asks for evidence of how the GSA has taken into consideration other market factors. He asked, for instance, for documents in the possession of the GSA concerning consultation between the GSA and representatives of the silver industry or marketing expert. Are you acquainted with that letter?

Mr. MARKON. Yes. I believe that is freedom of information request.

Senator HUMPHREY. Yes. The letter is dated November 18. Have you responded to that yet?

Mr. MARKON. Not as of this date, no, sir.

Senator HUMPHREY. Are you required in any way to consult with marketing experts and representatives of those affected?

Mr. MARKON. In the law it is permissive. We may form and activate committees and discuss with them marketing plans and so forth.

Senator HUMPHREY. Have you done that in the case of the silver sales?

Mr. MARKON. No, sir, we have not. The silver sale's authorization is peculiar. For the first time the Congress not only identifies a specific quantity of the commodity to be sold for a period of 3 years but they also provided that what we do not sell in 1 year the authority will lapse and will not carry over into the following year.

During the authorization process there were an awful lot of statements by both the Silver Users Association, the producers and everyone else who had an interest in the silver sale. We felt that because of that extensive debate in the authorization process that nothing much more could be developed in a consultation process.

Senator HUMPHREY. I will put in the record at this point two letters dated October 12, 1981, and November 18, 1981, from Governor Evans to Mr. Carmen and also a letter dated November 19, 1981, from Governor Evans to Senator Tower.

I would also like to enter into the record a letter dated November 13, 1981 from Mr. Markon to Senator Tower and a letter dated December 11, 1981 to Commissioner Markon from Chairman Price of the Committee on Armed Services, House of Representatives.

[The letters follow:]

OFFICE OF THE GOVERNOR,
STATE CAPITOL,
Boise, October 12, 1981.

GERALD P. CARMEN,
Administrator, General Services Administration, Washington, D.C.

DEAR MR. CARMEN: Please be advised that we take the position the sale of silver announced in G.S.A. Invitation No. FPRS–MET–248 may be in violation of 50 U.S.C. Section 98 et seq. We therefore respectfully request that you exercise your discretion to refuse all bids received by October 14, 1981, and further that you announce termination of the offering made therein until such time as this disposition can be made in accordance with law.

The basis for our position is that commencing the sale at this time may likely result in undue disruption of the usual markets of producers, processors and consumers, and may fail to protect the United States against avoidable loss, contrary to the requirements of 50 U.S.C. Section 98e(f).

We represent a state which accounts for forty-five percent of the entire U.S. domestic production of silver. The silver mining industry is a major factor in the economy of the entire state. Millions of dollars of state and local tax revenues are derived directly or indirectly from the production and processing of silver. For these reasons we have a direct and substantial interest in seeing that this action by your agency complies with the provisions of law regarding undue disruption of the usual markets of the silver industry.

Our principal concern is that your agency has failed to make a formal written determination as to whether this proposed sale will result in undue market disruption. We regard such a determination to be required under the Stockpiling Act.

If such a determination were to be made, we submit that it may well result in a finding that commencing the sale at this time will unduly disrupt the silver market. In support of this contention, we call your attention to the following facts:

1. The market price for silver is currently at the lowest level it has been in more than two years.

2. Your agency proposes to dispose in the current fiscal year of 46.5 million ounces of silver, an amount which exceeds the entire annual domestic mined production of silver. Introduction, or even the prospect of introduction, of this quantity of silver has been estimated to result in as much as three to five dollars per ounce depression in the market price of silver.

3. The Bunker Hill Company has announced its intent to cease operation of its mineral processing facilities in Kellogg, Idaho, as soon as current inventories of concentrates have been processed. Company officers have stated publicly that depresesd silver prices were one of the leading factors in their decision to cease operations. Unless a buyer for Bunker Hill Company is found in the very near future, the closure of the company's metallurgical plants will become almost

irreversible, thus severely reducing the domestic processing capacity for lead, zinc and silver. Company officials have represented to us that each dollar difference in the average market price of silver results in a change of three million dollars in pre-tax profit to the Bunker Hill Company.

4. Virtually all of the major silver producing companies have experienced sharp declines in earnings for the first two quarters of 1981. These earnings are directly related to the market price of silver. It is seriously questionable whether some of these companies can afford to absorb further declines in prices and earnings, without being forced to cease production.

5. The market price for silver is likely to rise in the future. Futures prices indicate a rise between 25 and 35 percent between now and next July. Worldwide consumption levels, which now exceed production levels, are likely to increase. By postponing the disposition of silver from the stockpile the United States should realize a better sales price. By deferring the stockpile disposition until prices have risen above the current "floor" price the ability of the silver producing industry to absorb the depressing effect on the market will be enhanced.

In light of the foregoing we contend that if the sale proceeds as scheduled commencing October 14, 1981, your agency may have failed to comply with the applicable provisions of law. We therefore urge you to exercise the right reserved to you under the terms of the invitation to bid (FPRS–MET–248) to reject all bids and terminate this offering.

In addition, we request that you advise us immediately of the following:

(1) Your decision on this request;

(2) Your criteria for determining "undue market disruption" and "avoidable loss to the United States";

(3) What forseeable circumstances and conditions would warrant suspending further silver sales if your decision is to proceed with the October 14 sale.

In closing we wish to emphasize that we do not seek to prevent the ultimate disposition of silver from the stockpile. We merely seek to have this disposition deferred at least until after the Bunker Hill Company sale question is resolved, and until the silver industry as a whole has recovered from the demonstrably vulnerable position in which it now finds itself.

Sincerely,

JOHN V. EVANS,
Governor.
LARRY E. CRAIG,
Member, U.S. House of Representatives.
DAVID H. LEROY,
Attorney General.
JAMES A. MCCLURE,
Member, U.S. Senate.

OFFICE OF THE GOVERNOR,
STATE CAPITOL,
Boise, November 18, 1981.

MR. GERALD P. CARMEN,
Administrator, U.S. General Services Administration,
Washington, D.C.

DEAR MR. CARMEN: In our letter to you of October 12, 1981, we requested that you terminate the sale of silver announced in G.S.A. Invitation No. FPRS–MET–248, for the reason that such sale appears to be in violation of 50 U.S.C. Section 98 et seq. In addition, we requested to be informed by you of your agency's criteria for determining "undue market disruption" and "avoidable loss to the United States." Also, we asked to be advised by you what forseeable circumstances and conditions would in your judgment warrant suspending further silver sales.

We have not received notice of your decision on our request to terminate the silver sales, nor the other information we requested. Therefore, we now formally request under the United States Freedom of Information Act to be provided by you with this information, and also with the following additional materials:

(1) Any documents in the possession of your agency concerning consultation between the G.S.A. and representatives of the silver industry or marketing experts on procedures to be adopted by you to minimize market disruption in connection with this sale;

(2) Any other documents possessed by G.S.A. or its agents, contractors or representatives, containing marketing analysis or other studies made by your agency in order to predict or quantify market disruption due to this sale.

In view of the urgency of the situation and the severe economic hardships now being borne by the silver producers in our state, we urge your immediate attention to this request.

Sincerely,

JOHN V. EVANS,
Governor.
DAVID H. LEROY,
Attorney General.

OFFICE OF THE GOVERNOR,
STATE CAPITOL,
Boise, November 19, 1981.

Hon. JOHN G. TOWER,
Senate Armed Services Committee,
Russell Senate Office Building,
Washington, D.C.

DEAR SENATOR TOWER: We respectfully request that the Committee on Armed Services convene an oversight hearing on the manner in which the General Services Administration is carrying out the sale of silver from the Strategic Stockpile.

The domestic silver producing industry is on the verge of collapse. The Bunker Hill Company is now in the process of closing the largest silver-lead-zinc smelter in the world. The depressed market price of silver was cited by the company as a major factor in their decision to close their mining and smelter operation. The specter of continued depressed prices—attributable in part of the on-going G.S.A. sales program—made it impossible to find a buyer for this important mining and metal processing facility.

With silver prices currently hovering around $8.00 per ounce many other major silver mines in our state and elsewhere will soon face the same fate as Bunker Hill. The price of silver, and the ratio between silver prices and gold prices, have been dropping steadily ever since the Administration announced its intention to dispose of stockpiled silver last February. This price deterioration has escalated since the actual sales commenced on October 14, 1981.

We recognize that the disposal of silver from the stockpile was authorized by Congress pursuant to Public Law 97–35. However, that law mandated that the disposition comply with the provisions of the Strategic and Critical Materials Stock Piling Act, which require mitigation of undue market disruption and avoidable loss to the United States. As the attached letters to the General Services Administration indicate, we have tried without success to discover what methodology was employed by G.S.A. to achieve compliance with these requirements. The records of your committee's deliberations over the proposed silver sale indicate a strong commitment to ensure that any disposition from the Stockpile be carried out in a manner that will least adversely impact domestic metal markets and will maximize the revenue realized from the sale for the Stockpile Transaction Fund. The evidence to date indicates neither of these objectives is being realized under the current silver sales plan.

We would hope that an oversight hearing would result in a suspension of further silver offerings by G.S.A. until either the market for silver grows stronger and the price returns to a more reasonable level or some alternate means of disposal—such as coinage—is authorized which will not contribute further to the unhealthy deterioration of the silver market.

Thank you for your assistance in this urgent matter.

Sincerely,

JOHN V. EVANS,
Governor.
DAVID H. LEROY,
Attorney General.

GENERAL SERVICES ADMINISTRATION,
FEDERAL PROPERTY RESOURCES SERVICE,
Washington, D.C., November 13, 1981.

Hon. JOHN G. TOWER,
Chairman, Armed Services Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The purpose of this letter is to provide the notification to Congress, as required under subsection 6(d)(1) of the Strategic and Critical Materials Stock Piling Act as amended (50 USC 98 et seq.) following a deter-

mination by the General Services Administration (GSA), that stockpile disposal action limited to domestic markets is not in the best interest of the government.

The disposal action involves the sale of silver authorized by Public Law 97-35 (95 Stat. 380). Currently, sale of silver is by competitive bids. Offerings are made each Wednesday for 1,250,000 troy ounces limited by the amount authorized in Public Law 97-35.

We have determined that to continue to limit sales for domestic consumption only is not in the best interest of the government. Our determination is supported by the following:

1. Sales interest has declined since the first bid opening by almost 50 percent on a volume basis and the number of responsible bidders has dropped by 60 percent.

2. Information provided to GSA indicates that industry participants believe the current sales restriction is unrealistic. Silver is a fungible material, in both the metals and the investment industries and should move freely in the international marketplace.

3. Removing the sales restriction will protect the government's interest by increasing the degree of competition and diffuse or minimize market effects that currently have to be absorbed directly in the domestic market.

4. GSA does not believe that certification provides a mechanism for enforcing domestic consumption that can be implemented or administered. Silver, once entered into its worldwide market, tends to lose its identity while readily moving from one country to another.

5. We believe that the quantity and purity of the silver to be offered will adequately serve the needs of the domestic market with sufficient quantities remaining for the international marketplace.

6. Restriction on use results in a discounting of bids below the market prices of unrestricted silver.

Commodity Exchange of New York (COMEX) has advised that it will not accept government silver into its warehouses because of this restriction. Other dealers have made similar statements and point to a requirement of maintaining separate inventories to comply with GSA conditions.

We believe that the removal of the restriction will assist in our disposal efforts and will produce a more competitive position in the silver market. As further provided under subsection 6(d)(1) of the Act, no obligations of the government with respect to this disposal will be entered into until 30 days after your receipt of this notification.

Sincerely,

ROY MARKON, *Commissioner.*

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, D.C., December 11, 1981.

Mr. ROY MARKON,
Commissioner of Federal Property Resources Service,
General Services Administration,
Washington, D.C.

DEAR COMMISSIONER MARKON: This is in reference to your letter of November 13, 1981 notifying the committee, as required under subsection 6(d)(1) of the Strategic and Critical Materials Stock Piling Act as amended (50 U.S.C. 98 et seq.) of the determination by GSA that the disposal of silver and tin limited to domestic markets is not feasible.

This is to advise you that the Committee on Armed Services interposes no objection to your proposal to sell silver and tin without the restriction that the purchaser certify that the material will be used for domestic consumption.

Sincerely,

MELVIN PRICE, *Chairman.*

Senator HUMPHREY. Mr. Markon, tell us something about the internal workings of your marketing department in the matter of silver sales. You have made the point that a good-faith effort has been made to dispose of the silver responsibly according to your directions.

Yet, what are the internal workings? How does your marketing department determine what is a fair market price and whether or not you are disrupting the marketplace?

Mr. MARKON. Yes, sir. I don't suppose our internal procedures are different than any other commodity broker's procedures. We all work from data. The data is available to everyone. We take probably the same kind of data that any broker or any other seller of silver would take, we analyze the data and we reach conclusions as to what a fair price would be for the commodity.

Senator HUMPHREY. So it involves a great deal of judgment?

Mr. MARKON. Yes. It is an analytical process and it involves judgment, but there is an awful lot of data to support the judgments. The final judgment as to what discount or what difference there would be in a GSA bottom line price and the price indicated by other sellers of the commodity is one that is reserved to myself and to the Administrator. In this particular case Mr. Carmen has reserved it to himself. All sales are discussed with him and all decisions in this particular regard are made by Gerry Carmen.

Senator HUMPHREY. You say the matter of consultation with affected parties is permissive. Does GSA as a general practice avail itself of that opportunity or is it the exception to the rule in the case of all different kinds of sales and purchases?

Mr. MARKON. I think we would talk more in a formal consultation process versus informal. There is an awful lot of interest in the stockpile commodities either on the sales side or on the acquisition side.

As the Government announces its plans, either through the announcements of priorities or announcements on legislative authorizations to sell, we do receive comments from a lot of people on an informal basis. If we felt that these comments were not adequate and did not adequately cover the entire field or that there was a requirement for something more we would call a formal session. In most of these cases we have received comments from just about every quarter of the particular market.

Senator HUMPHREY. How many people do you have in the Department that is selling silver? Is it a separate office? Give us some idea of the structure.

Mr. MARKON. Well, the sales are conducted in the Office of Stockpile Transactions.

Senator HUMPHREY. So it is an office that deals with all of the commodities?

Mr. MARKON. Yes. That is one office and then there is an Office of Stockpile Management that handles the shipping and the packaging for shipment and also the receipt and storage of commodities. So the two work in conjunction with each other. They constitute half of my service. I also have the Office of Real Property and Personal Property.

Now the Office of Stockpile Transactions has a division that does the marketing and technical analysis, they have a sales division and an acquisition division. They are basically three operating divisions.

It is headed by an Assistant Commissioner and the Division Chief of the Disposal Division provides the basic recommendations for the type of sale, the amount of the commodity, and the frequency of the sale which is arrived at in consultation both with the shipping department or the storage department and the marketing and technical and

also takes into consideration the consultation processes that we may have had with the State Department or with other people of interest in the commodity markets.

Senator HUMPHREY. How many people are there in that department?

Mr. MARKON. In the sales department?

Senator HUMPHREY. Yes.

Mr. MARKON. In the total stockpile transaction there are approximately 54 people.

Senator HUMPHREY. Excluding packaging and shipping how many deal strictly with buying and selling?

Mr. MARKON. In the silver there are about four.

Senator HUMPHREY. Do they specialize in silver or do they have other commodities as well?

Mr. MARKON. They have other commodities as well.

Senator HUMPHREY. We have already touched on this somewhat, but will you explain the necessity of selling silver on the international market.

Mr. MARKON. We feel that to eliminate unnecessary restrictions that hamper our sales will be in the best interests of the Government. We feel that by eliminating this restriction we will get more competition and we feel that the bidding or the prices will be a little better.

One of the big drawbacks on buying the GSA silver is that it is not exchangeable on the international market. People cannot fill other commitments. For example, on the silver exchanges like Combanks they will not accept our silver into their inventory because of this restriction. The removal of the restriction will make silver more alienable, at least the Government silver more alienable, and as much we feel that we will be in a better competitive position.

Senator HUMPHREY. I see. Turning now to the McClure amendment, will you outline the administration's objections to the McClure amendment.

Mr. MARKON. I think there are two parts to the amendment. One is to stop the sale of silver and, second, when the silver sales, if and when they are resumed, to have the method determined by the Congress.

As to stopping the sale of silver, we don't feel that stopping the sale of silver, whatever silver we could sell in this interim period until the GAO report is concluded, would be that significant and would really be more disruptive I think in the market than continuing our sales.

It is disruptive for the United States to get in and get out of the market. Markets are sensitive to these actions and they do produce, I think, unnecessary speculation on the part of a lot of people.

On the sale of the silver, the Senator mentioned the 8,000 bar minimum determined by GSA. We are basically a wholesaler of silver. The silver comes in 1,000-ounce bars. For us to do anything else with the bars is an expense. We would have to have an appropriation and we would have to hire people.

Our plan was to minimize the necessity for additional appropriations and certainly minimize the necessity for adding more people to the payroll.

The 8,000 is a wholesale quantity. On prior sales we had limitations much higher than that. There were 32,000 ounces which was the minimum.

The cost of handling bars separately is an expense that we had hoped to avoid. We sell the silver FOB either in San Francisco or in New York. They have limited loading facilities and it would be very difficult to have crowds of people assembled there to pick up one bar or two bars of silver. So it was an arbitrary figure.

At the time I testified before the House Armed Services Committee, one of the Congressmen from Georgia, Mr. McDonald, asked me if I would reconsider the 8,000 limit and I said if I had heard from the market itself, if enough people expressed an interest which would make it feasible or profitable that we would reconsider. I have not heard any complaints about the 8,000-ounce minimum.

Senator HUMPHREY. Very well.

Before we go on to tin I want to ask Mr. Krueger about this GAO study underway. Are you privy to that at this point?

Mr. KRUEGER. We did assist the GAO team in their earlier investigations. We have not been given an opportunity to comment on a draft of that report and have not seen the final report.

Senator HUMPHREY. I wish we had it before us. According to Senator McClure, the study reaches a wholly new conclusion than that reached in the study 2 years ago. Is that your understanding?

Mr. KRUEGER. That is my understanding. It was surprising because a number of members of this team were members of the team on the prior study. The Stockpiling Act calls for stockpiling for the military, industrial, and essential civilian needs, and we calculate our stockpile goals based on that criteria in the law.

I believe, and this is just from understanding in conversation rather than seeing anything in writing, that the GAO report would suggest that there are reasons for stockpiling beyond the basic criteria contained in the act and that it may be necessary to be used as money in funding operations in other parts of the world.

Senator HUMPHREY. FEMA ordinarily reaches these decisions without the assistance of GAO. Isn't that the procedure?

Mr. KRUEGER. Yes, sir.

Senator HUMPHREY. If the GAO study contradicts that of 2 years ago and contradicts also the position of your office on the silver sales, then where do we go from there?

Mr. KRUEGER. I would think that as long as we are calculating the stockpile goals in accordance with the law, that is what we should abide by. Without having seen the GAO report, it is difficult to comment more than that.

Senator HUMPHREY. I am sure we will have plenty of opportunity to get into that.

Mr. Markon, I have a letter dated November 30, 1981, from Bethlehem Steel Corp. which I would like to insert into the record at this point and also a letter from Gulf Chemical & Metallurgical Co. dated December 2, 1981, about the tin sales.

Senator HUMPHREY. The letters will be inserted in the hearing record.

[The letters referred to follow:]

BETHLEHEM STEEL CORP.,
Bethlehem, Pa., November 30, 1981.

Hon. JOHN TOWER,
Chairman, Committee on Armed Services,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: According to a recent announcement, your Committee was notified on November 13, 1981 by the Commissioner, Federal Property Resources Services, General Services Administration, of plans to amend the current stockpile disposal practices on tin so that sales will no longer be limited to domestic consumption. It is our understanding that unless objected to by the Armed Services Committees, the amended provisions become effective thirty days following notification.

The purpose of this letter is to go on record with our Committee as opposed to the projected change in procedure and to outline the reasons underlying our position:

1. During the period several years ago when tin stockpile release authorization legislation was making its way through the Congress, Bethlehem testified in favor of releasing tin, but with the reservation that eventual sales would be for domestic consumption only.

2. The Strategic and Critical Materials Stock Piling Act of 1979 (PL 96–41), dealing with stockpile administration, contains specific language the intent of which is to limit sales to domestic consumption.

3. Tin is only one of a number of stockpiled materials the inventory of which is in excess of strategic goals. Tin is, however, unique in that it is one of the few excess materials, and the only excess metal, on which the United States is totally import dependent.

4. The folly of selling into export a material that must then be imported should be evident.

5. The reason given for this proposed departure from established practice is that it will result in increased tin sales. The resultant increased revenues into the National Defense Stockpile Transaction Fund, created under Public Law 96–41, will enable the purchase of other materials in which the stockpile is deficient. Appealing as that may sound, it nevertheless translates into a fiscally motivated attempt to frustrate the intent of the Act, one guideline of which, a subsection 3(b)(1), states that the stockpile, "is not to be used for economic or budgetary purposes."

6. Subsequent to the GSA announcement, trade journals have carried reports of the nervousness developing in international tin markets over the prospect of unrestricted stockpile tin sales. One report even speculates that, with warehouse stocks and prices at record levels, increased GSA sales, "could bust the price balloon by forcing the cartel members to either buy more tin or else see the price fall." Even that hopeful prospect is not sufficient temptation to persuade us that sound principles be compromised for temporary gain.

It is our sincere hope that your Committee will view the proposed changes as we do and so notify the Commissioner.

Sincerely,

R. K. SMITH,
Vice President, Purchasing.

GULF CHEMICAL & METALLURGICAL CO.,
Texas City, Tex., December 2, 1981.

Hon. JOHN G. TOWER,
Chairman, Committee on Armed Services,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: I understand that the General Services Administration has recently notified you of its intention to remove the "domestic consumption only" limitation on the disposal of surplus tin from the National Strategic Stockpile. As president of Gulf Chemical and Metallurgical Company, which owns and operates the only tin smelter in the United States, I, too, believe that the "domestic only" limitation should be removed. This action will enable the GSA to sell surplus tin on a worldwide basis, and it may reduce the undue disruption to our markets caused by the GSA policy of selling tin at depressed prices in the United States.

Indeed, I respectfully renew the plea first made to you last July that your Committee review the conduct of GSA's tin disposal program in its entirety.

Such broad review is all the more urgent in light of the October 21, 1981 decision of the United States District Court for the District of Columbia in *Associated Metals and Minerals Corp.* v. *Carmen*, 81–1333. The Court found that the existing GSA tin disposal program did not violate the Stockpile Revision Act, 50 U.S.C. § 98e(b)(2), and denied the request of Associated Metals and Minerals Corporation, our parent corporation, that the program be enjoined.

The Court's opinion, which is enclosed, raises serious policy questions with respect to both stockpile disposals in general and tin disposals in particular. The Court ruled that GSA tin disposals would not be in violation of the Act even if, as the plaintiffs alleged, those sales distorted the traditional price relationships between the United States and other world markets, thereby rendering continued Texas City Smelter operations uneconomic. The Court further ruled that GSA could dispose of tin at the same time that the International Tin Council was attempting to support prices by purchasing tin pursuant to the International Tin Agreement. Indeed, the Court stated that GSA could consciously rely on Tin Council purchases to neutralize the market impact of its sales.

Associated Metals plans to appeal the decision. But whatever the outcome, Congressional review is in order. If the Court's rulings are upheld, there would appear to be serious doubt as to whether existing stockpile disposal legislation adequately protects the interests of domestic producers, processors, and consumers and adequately ensures United States compliance with international treaty obligations. If the Court's rulings are reversed, there would appear to be a need to modify GSA disposal policies. In either event, and particularly in light of the time that is consumed by an appeal, prompt Congressional attention to these matters is a necessity.

Very truly yours,

E. B. KING,
President.

Enclosure.

United States District Court for the District of Columbia

(Civil Action No. 81–1333)

ASSOCIATED METALS AND MINERALS CORPORATION, PLAINTIFF

v.

GERALD P. CARMEN, ET AL., DEFENDANTS

MEMORANDUM

This matter was originally before the Court on plaintiff's motion for a preliminary injunction, supported and opposed by extensive affidavits and legal memoranda. In Findings of Fact and Conclusions of Law filed July 22, 1981, the Court denied the motion because plaintiff was "unlikely to establish by a preponderance of the evidence . . . that defendants' decision to sell off-the-shelf and its actions implementing that decision were arbitrary, capricious, and not in accordance with law." The case is here again on cross-motions for summary judgment, supported by further affidavits and memoranda. Examination of the summary judgment papers confirms the earlier prognosis that plaintiff would not be able to establish on the merits that the defendants' actions were so obviously unlawful as to be invalidated and enjoined under the "arbitrary and capricious" standard of 5 U.S.C. § 706(2)(A). *See Bowman* v. *Arkansas-Best Freight System, Inc.*, 419 U.S. 281, 285 (1974). Undisputed facts considered in the light of the relevant statutes and their legislative history demonstrate that the defendants' practice of making off-the-shelf sales at prices below the ITC "may sell and must sell" range was contemplated or ratified by Congress[1] and that defendants have made the "efforts" required of them by Congress "to avoid undue disruption of the usual markets of producers, processors, and consumers," and that the markets have not, in fact, been unduly disrupted. Accordingly, for reasons fully stated in the Court's Findings and Conclusions of July 22, 1981, as amended, and briefly supplemented below, an accompanying order will deny plaintiff's motion for summary judgment and grant the cross-motion filed by defendants.

[1] "The material will be sold by formal advertising or off-the-shelf GSA fixed-price daily." H. Rep. No. 96–56, 96th Cong., 1st Sess. 3 (1979).

The principal addition to the record before the Court at the preliminary injunction stage is an "Analysis of the World Tin Market," ("Analysis") adduced in evidence by the affidavit of its author, Dr. Samuel M. Rosenblatt. Dr. Rosenblatt's analysis concludes that the GSA off-the-shelf sales program has "changed the relationship" between the Penang, London, and New York segments of the world tin market. "As a consequence," according to the Analysis, "the market is no longer so effectively integrated as it previously had been." Analysis, p. 69.

Defendants counter that world tin prices were falling before GSA began sales off-the-shelf, and have risen dramatically despite the continuation of off-the-shelf sales after this Court refused to enjoin such sales. Defendants further contend that the United States is farther than other markets from raw tin sources so that the current abnormally-high interest rates affect disproportionately the cost of carrying tin inventories to the United States and therefore the price here. Defendants also argue that the fluctuations in the difference between the prices in the several markets noted by Dr. Rosenblatt are neither significant nor inconsistent with earlier market experience.

Although the defendants' contentions seem quite plausible, it is unnecessary to determine whether the GSA sales under the off-the-shelf program or some other factor is the proximate cause of the phenomenon observed by Dr. Rosenblatt, or whether there is in fact such a phenomenon. It would not have been arbitrary, capricious, or unreasonable for GSA to conclude, either explicitly or sub silentio, that such a change in the tin market would not constitute the undue disruption of markets which Congress admonished GSA to make efforts to avoid. Nor would proof of such a phenomenon and these causal connections with GSA carry plaintiff's heavy burden of persuading the Court that GSA had not made all the efforts required of it to prevent undue market disruption consistent with disposing of 30,000 tons of tin in those years.

Nor does plaintiff's further demonstration of the hardship suffered by its division at Texas City evidence the kind of market disruption which would justify judicial interference with GSA's essentially commercial decisions. It is undisputed that although GSA is authorized to sell 30,000 tons of tin, it has sold only 2,200 tons to date. Nor is it disputed that when GSA attempted to sell by advertised bids, it succeeded in moving a mere 5 tons. Nothing advanced by plaintiff shows that the losses incurred at Texas City would be less if GSA sold the same or, as may become necessary, greater quantities by some other method. GSA's prime consideration is to carry out Congress' directive, issued in the name of national defense, to move 30,000 tons of tin in three years. In its informed opinion, it could not carry out this mandate if it made sales by soliciting bids or only when tin prices were in the upper "may or must sell" range of the ITA scale. See Long Affidavit III, paragraph 10. The undisputed facts show that if GSA carries out its mandate to sell 30,000 tons, there will be some market disruption, and plaintiff will make smaller profits at Texas City than it would if GSA were not a seller in the market. But this risk to market tranquility and to the Texas City smelter is attributable to free market forces and the Act of Congress, not to the whim of GSA.

Nothing offered by plaintiff in support of its summary judgment motion justifies a decision to overturn the commercial decisions here made by GSA. An accompanying order reflects these conclusions.

LOUIS F. OBERDORFER,
United States District Judge.

Date: October 21, 1981.

United States District Court for the District of Columbia

(Civil Action No. 81–1333)

ASSOCIATED METALS AND MINERALS CORPORATION, PLAINTIFF,

v.

GERALD P. CARMEN, ET AL., DEFENDANTS

ORDER AND JUDGMENT

Upon consideration of the parties' cross-motions for summary judgment, the materials filed in support thereof, the parties' respective oppositions thereto, and the entire record herein, it is by the Court this 21st day of October, 1981.

Ordered: That plaintiff's motion for summary judgment be and hereby is denied; and it is further

Ordered: That defendants' motion for summary judgment be and hereby is granted and judgment is entered for DEFENDANTS.

LOUIS F. OBERDORFER,
United States District Judge.

Senator HUMPHREY. Bethlehem doesn't think it is such a good idea and Gulf Chemical & Metallurgical things the domestic only limitation should be removed.

Bethlehem makes the point that tin is the only material in the stockpile which is in excess, but on which the United States is totally dependent. Is that a correct assertion that we are totally dependent upon tin imports among those which are in excess?

Mr. MARKON. Yes; except for the secondary production of tin, that is true. It is a reclamation process of extracting tin from scrap, so to speak.

Senator HUMPHREY. Yes.

Mr. MARKON. There are no tin mines, so to speak, in the United States. Now our objective is to sell 10,000 tons and that was to the domestic market. There was more than 10,000 tons consumed by the domestic market, but they only bought 3,000 tons from GSA. There is plenty of tin for the domestic consumer. To sell tin for export would not in any way hamper the availability of tin to the domestic consumer.

Senator HUMPHREY. Mr. Krueger, does GAO have any argument with your assessment on the tin situation?

Mr. KRUEGER. I am unaware that they have looked at that in particular.

Senator HUMPHREY. What impact, Mr. Markon, has occurred in the marketplace as a result of your sales of tin?

Mr. MARKON. I don't think there is any impact. I think tin is an unusual market at the present time. There is an awful lot of allegation of price fixing and market manipulation. The price of tin in the last several months has risen contrary to the other commodity markets where the markets are soft and the prices are falling.

I think a sale of 3,000 tons of tin of a 10,000 ton objective in a rising market indicates that there is negative impact.

Senator HUMPHREY. At this point I will place in the record your letter dated November 13, 1981, to Senator Tower on the subject of the tin sales and the need to go into the international market.

[The letter follows:]

GENERAL SERVICES ADMINISTRATION,
FEDERAL PROPERTY RESOURCES SERVICE,
Washington, D.C., November 13, 1981.

Hon. JOHN G. TOWER,
Chairman, Armed Services Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The purpose of this letter is to provide the notification to Congress, as required under subsection 6(d)(1) of the Strategic and Critical Materials Stock Piling Act as amended (50 USC 98 et seq) following a determination by the General Services Administration (GSA), that stockpile disposal action limited to domestic markets is not in the best interest of the government.

The disposal action involves the sale of tin authorized by Public Law 96-175 (95 Stat. 380). Currently, the sale of tin is on a daily off-the-shelf basis with

annual rates limited to approximately 10,000 tons per year and the total amount limited to the quantity authorized by Public Law 96–175.

We have determined that to continue to limit sales for domestic consumption only is not in the best interest of the government. Our determination is supported by the following:

1. Sales results, to date, have been less than satisfactory. Since the beginning offering on July 1, 1980, we have sold a total of 2,810 tons or slightly more than 20 percent of our planned offering rate.

2. Increased cash input for the sorely needed restructuring of the National Defense Stockpile has been slowed as tin is the largest dollar value excess material that could be sold.

3. Tin is a material that is traded in worldwide markets, including recognized exchanges. As a fungible material, the excess tin should have the ability to move freely in the marketplace.

4. Removing the sales restriction will protect the government's interest by increasing the scope of competition and moderate domestic market effects.

5. GSA does not believe that certification provides a mechanism for enforcing domestic consumption that can be implemented or administered. Tin, once entered into its worldwide market, tends to lose its identity while readily moving from one country to another.

6. We believe that the quantity and purity of the tin to be offered will adequately serve the needs of the domestic market with sufficient quantities remaining for the international marketplace.

7. Removal of market constraints on material movement will enable purchasers to spread the risk and strengthen the potential return to the government.

We believe that the removal of the restriction will assist in our disposal efforts and will produce a more competitive position in the tin market. As further provided under subsection 6(d)(1) of the Act, no obligations of the government with respect to this disposal will be entered into until 30 days after your receipt of this notification.

Sincerely,

ROY MARKON,
Commissioner.

Senator HUMPHREY. How do you answer the objections of the domestic tin industry?

Mr. MARKON. Well, Gulf Chemical & Metallurgical that you mentioned is in a unique position because they are a processor of tin in high concentrates from overseas areas and they do make tin. The plant was originally constructed by the Government and then sold to private industry.

At the present time we are involved in a lawsuit. They have challenged our positions as to what constitutes undue market disruption. Their theory that we must maintain a ratio to protect the producer price more or less is what is being tested.

The case was heard by the district court basically on briefs and depositions and the district court judge agreed with the position of the U.S. Government and summarily dismissed the case and this is on appeal at the present time. So I can understand why the Gulf Chemical & Metallurgical would write a letter and continue their position as expressed before the court.

I don't understand Bethlehem's position. They are not the greatest consumer and we haven't sold too much tin to them. If they are so desirous of buying our tin I welcome their business, but so far we have not received much business from them.

Senator HUMPHREY. When would you plan to make your first sales of tin outside the United States?

Mr. MARKON. We would just eliminate the restriction. Whoever buys the tin can do with it what they please. If the 30-day period expired this weekend we would be in a position to do that today.

Senator HUMPHREY. Mr. Calingaert, what has been the position of foreign nations with regard to these tin sales?

Mr. CALINGAERT. You are referring to the proposed internationalization of tin sales?

Senator HUMPHREY. Yes.

Mr. CALINGAERT. We have received objections from two producing countries. One is Malaysia and the other is Bolivia. We have not heard any comments from the other major tin exporting countries.

Senator HUMPHREY. I beg your pardon. I missed what you said.

Mr. CALINGAERT. Bolivia and Malaysia have objected and other producing countries have not made any response.

Senator HUMPHREY. What is the basis of their objection? Do they feel that it is going to affect their domestic industry?

Mr. CALINGAERT. Basically that it will further depress market prices. They of course are concerned in general about all disposals of sales.

Senator HUMPHREY. How has the Department of State responded?

Mr. CALINGAERT. We have stated that we view the proposed change essentially as a technical change in the method of disposal. The main point is the overall program, which is, as Mr. Markon has explained, 30,000 tons over 3 years with a goal of 10,000 per year, will be done in a manner that will not unduly disrupt the market. Indeed, we have held to that and will continue to.

Senator HUMPHREY. Very well. I have no further questions at this time. We may submit further questions to you in writing.

Thank you very much for your time and for your testimony.

Before we close I would like to include for the record information submitted by the Silver Users Association.

SILVER USERS ASSOCIATION,
Washington, D.C., December 21, 1981.

Hon. GORDON J. HUMPHREY,
Chairman, Subcommittee on Preparedness, Armed Services Committee, U.S. Senate, Washington, D.C.

DEAR SENATOR HUMPHREY: Pursuant to your invitation at the hearing on S. 1823 held on December 14, 1981, the Silver Users Association requests that this letter and enclosures be made a part of the record.

The attached letter and memorandum were prepared after the Senate adopted Amendment U.P. No. 738 to H.R. 4995, the Defense Appropriations Bill. We believe the arguments contained in these documents respond equally as well to the comments made at the hearing by Senator James McClure.

In addition, several points were made and questions raised at the hearing and from letters introduced, to which we would respond as follows:

The GSA has handled the silver sales in a responsible manner, considering the state of the market. Were there any complaint, the case could probably be made that the cutoff price on the four occasions when silver was sold, was too high since government silver could not be as easily exchanged by holders as that traded daily on the U.S. markets.

The revenue from the silver sales is needed for purchasing items required to meet strategic goals. Use of this money is not for budget purposes, but rather is for defense preparedness.

Current sales authority permits retention of 34.4 million ounces of silver in the strategic stockpile, rather than the sale of all silver in the stockpile.

The GSA request to remove the domestic-use-only restriction was approved last week by the Armed Services Committees of the Congress, thus indicating continued support for the sales of surplus silver.

The silver sales cannot be claimed as a major factor contributing to lower silver prices since only two million ounces were sold during ten weeks when 11.25 million ounces were offered.

Federal officials have declared that silver stockpile goals and the handling of surplus disposals are determined by the same rules as for other commodities.

The conduct of GSA sales should not be characterized as a "dumping" of silver since it was done in conformance with the Strategic and Critical Materials Stock Piling Act. Those in favor of higher prices and opposed to reasonable sales of surplus silver refer to the "minimum disruption" clause of the Act as apparently applicable only when the price trend is down.

The amount of silver authorized for disposal during fiscal year 1982 represents about one third of the silver used by domestic industry. It about equals the normal amount imported annually.

Reduction in silver imports improves the U.S. balance of payments. For each dollar change in price, on an annual basis, these payments are changed by about $50 million.

Much has been said about silver prices during the sales period. The record should show that while the average price of silver sold by GSA ranged between $8.96 and $9.38, the price of silver ranged between $8.03 and $9.53 during the ten weeks of sales, with an average of $8.77 per ounce.

Even though the current price of silver is at one-sixth of the highest price in January 1980, the average this year is still 100 percent higher than the average price for 1978. A $9.00 price is not a "floor" when historical levels are considered.

Each dollar rise in the silver price means some $135 million of increases in costs to manufacturers and the resulting additional burden on millions of consumers who use products containing important amounts of silver.

Having a suspension of sales until prices rise is not appropriate for the disposal program since this would be disruptive. There is no assurance that prices will rise so long as there is a serious recession and demand for the material remains relatively low.

In discussing silver prices, references are made to the gold/silver ratio. The claim is that the current ratio of 50 to 1 is out of line. The record should show that this ratio has varied between 16 to 1 and 100 to 1 during the last sixty years.

In discussing the drop in silver prices, those supporting higher prices fail to point out that prices for other metals have dropped including gold. The latter has been as high as $599.25 per ounce and as low as $396.75 per ounce during 1981.

Using a coinage program for disposal method would keep silver from the industrial market; however, if recent silver coinage proposals can be any guide, the disposal effort would not be successful.

Again, we thank you and the Subcommittee for this opportunity to present additional information on the subject of stockpile legislation. We are prepared to meet with you to discuss this subject so important to defense preparedness, the economy and the users of products containing silver.

Sincerely,

WALTER L. FRANKLAND, Jr.,
Executive Vice President

Enclosures.

SILVER USERS ASSOCIATION,
Washington, D.C., December 4, 1981

Hon. HOWARD H. BAKER, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR BAKER: The move by Senator McClure to amend the Defense Appropriation Act by stopping the sale of surplus silver should be exposed for what it is and to show how it could further jeopardize the integrity of the strategic stockpile.

This issue has been debated for years. The matter has been studied many times with the same conclusion—that silver in the stockpile is surplus to defense requirements and should be returned to the market as the law requires. The GAO has even determined that new domestic silver production is sufficient to meet defense-tier requirements in wartime. Yet, in a few minutes, the Senate adopted the McClure amendment without debate. If allowed to stand in the final bill needed funds, perhaps a half-billion dollars, from the sale of silver would not be available this year to purchase items critically needed for defense preparedness.

To argue that government sales have been the reason for lower silver prices is to disregard completely the facts, the state of the economy and the trend of lessening inflationary pressures. In a recession, the demand by industry for the white metal drops quickly. Last year and so far this year, the demand is at a 15-year low. Moreover, with lowering interest rates and less inflation, there is not the investment motivation as there has been in the past.

Although silver prices have retreated steadily from the speculatively induced $48 high of January 21, 1980, the blame cannot be placed on government sales

since little silver has been sold. Ten million ounces have been offered in eight weeks and only two million ounces have been awarded. On November 4, when the last sale was made, the price of silver was $9.13. For four weeks, the government has not sold silver, yet the price has dropped to as low as $8.03 per ounce. Many observers expect the downward trend in silver and gold prices to continue until there is a decided improvement in the economy. In the meantime, millions of Americans can benefit from lower prices as they consume silver used in medical x-rays, electrical appliances, tableware, medicines and other useful products.

Additionally, sales of government silver do help the balance of payments since this country is usually a net importer of the white metal. Even if there is disposal of all the silver authorized for sale, the stockpile will still contain 34.4 million ounces.

Finally, why should not the taxpayer receive a break for a change? Put surplus property to work for a stronger defense and a better government financial position.

Sincerely,

WALTER L. FRANKLAND, Jr.,
Executive Vice President.

SILVER USERS ASSOCIATION,
Washington, D.C.

To: Conferees on the Defense Appropriations Act of 1982.
Subject: McClure Amendment to Stop Silver Sales.
Date: December 7, 1981.

1. The amendment overturns the earlier action of Congress to take revenue from the sales to purchase items really needed for the stockpile. The sales program was developed following years of debate with the GAO verifying the surplus category for silver especially when the silver in Canada and Mexico is considered.

2. As a part of the Budget Reconciliation Act, the proposed sales could provide this year an estimated half-billion dollars which will have to be replaced by some other revenue source.

3. The sales by GSA have had insufficient time to affect the silver market. Although the government has offered 10 million ounces of silver, only two million ounces have been sold because the bids were considered to be too low. The refusal to sell was made to avoid any charge that GSA was disrupting the market.

4. Sales of government silver also help the balance of payments because the U.S. is historically a net importer of silver.

5. Silver and gold prices have been dropping from their all-time highs of January, 1980, due to the recession and the retreat of inflationary pressures. In the case of silver, industrial consumption is at its lowest level since 1964 while available silver supplies have increased.

6. Even if the sales do not cause lower silver prices, psychologically they could discourage excess speculation to the benefit of millions of Americans who use products containing silver such as photographic film, medicines, electronic and electrical products, tableware and other useful items.

7. At current levels of nearly $9.00 per ounce, the price is about one-fifth that of the speculatively-induced high of $48 in January, 1980. The present price is still nearly twice the average price of only three years ago. It is unrealistic to label current price levels as low when considered in the context of historical averages.

8. The main argument made by Senator McClure is the alleged damage being done to the Idaho economy by lower silver prices caused by the silver sales. In view of the many factors involved in setting the silver sales program, the Senator's arguments become parochial and against the overall public interest.

9. Even if all the silver planned for current disposal is sold, 34.4 million ounces of silver will remain in the defense stockpile. This amount is about equal to one year of domestic production.

10. The suggestion of putting silver in coins as a means of disposal has been proven unsuccessful in the past, witness the failure of coin programs, such as the Eisenhower dollar and the Bi-centennial proof sets.

The subcommittee stands adjourned.

[Whereupon, at 11:24 a.m., the subcommittee adjourned, subject to the call of the Chair.]

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